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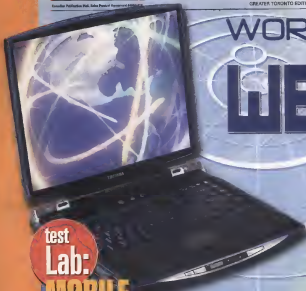
# The Computer PAPER

A Trade.com Publication

Canada's Computer Information Source

Executive Publications Inc., Sales Product Department 416-291-1111

GREATER TORONTO EDITION JUNE 2002 VOLUME 15 NO 06



test  
Lab:

**MOBILE  
MULTIMEDIA**



SAMSUNG

TechKnow Talk

# Technology for SMALL BUSINESS

## Laser printer technology for everyday life

Small business can suffer big setbacks if their technology isn't up to par. They face the same hurdles giant corporations do, but with far less financial and human resources. Perhaps more than anyone, small office/home office professionals need high-tech tools that work as hard as they do.

Which is where Samsung laser printers come in. Designed to answer the top four demands of small business — power, economy, reliability and ease of use — Samsung laser printers feature high resolution output at a surprisingly quick clip, low running costs, easy maintenance, and user friendly extras such as high paper capacity and push-button convenience. In addition, only Samsung laser printers offer Push & Save technology, a Canadian innovation that has been adopted around the world.

### Samsung's Push & Save technology saves the day

The beauty of Push & Save technology lies in its ability to save your time, money and hassle. With the push of a button, you can save up to 40 per cent on costs. That's about \$165 savings per annum based on a print volume of 1,400 pages per month. Or you can skip the last page of a print job without re-spooling, regardless of whether the computer is on or off. Last, but not least, Push & Save allows users to cancel a print job instantly. Gone are the days when you'd be scrambling to press the correct combination of keys on your keypad.

### Small business needs big value

In addition to Push & Save technology, Samsung's laser printers deliver incredible value. The ML-1210 makes laser technology accessible to almost everyone, starting at around \$259. Although the price is low, the quality is high. ML-1210 users enjoy a resolution of 600 x 600 dpi, 12 pages per minute, 8 MB of memory and stacks of ultra convenient features such as a one-piece easy-to-install toner cartridge.

Not surprisingly, the ML-1210 laser printer has captured many awards including the coveted ICES Innovation 2002 Award, the C/Net Editor's Choice Award, and the Editor's Pick from both Computer Shopper and Read PC.

Within the same series, is Samsung's ML-1250, a 12 page per minute monochrome laser printer with a resolution of 1200 dpi. Shipped with 4 MB of memory, an optional upgrade enables the printer to be expanded to 64 MB. The ML-1250 boasts a PC/NV simulation so it can handle an array of projects including photos, transparencies, letters and card stock.

With the launch of Samsung's ML-1400 series, small business can look forward to more speed, power and performance from this revolutionary line of laser printers. Fully serviceable and backed by tremendous Q/S support, the ML-1400 series features 15 pages per minute print time, up to 1200 dpi, and up to 64 MB of memory. Users will enjoy all the quality they've come to expect from Samsung, at a very attractive price.



ML-1210



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**GREATER TORONTO  
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JUNE 2002**

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Lab Test: Graphics and sound

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Subscription begins: ..... Wed., June 12

### August 2002

Cover story: The budgetizer

Lab Test: Flat-panel monitors

Ad deadline: ..... Tue., July 2  
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## Large Screen LCDs

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# Computing in motion



FROM THE EDITOR

Satellite notebook line between Q4 2001 and the same period a year earlier. Toshiba is the fifth biggest PC brand in Canada—and the only PCs it sells here are notebooks.

Hevier-Paidard Canada is another vendor that has done well with its consumer line of Fusion PCs, and recently HP spokesman Jaka Kelly dropped by TCP to show the company's latest Pavilion notebooks, including the n1115 that boasts a 1.4 GHz mobile Pentium 4 processor and 15-inch screen. Kelly says that consumer notebook users tend to want to do a more diverse range of tasks than desktop PC users, and the inclusion of more features on the notebook platform is a response to that.

In HP's case, it means better audio, with 3D sound support and integrated Polk Audio speakers, better graphics, and more video memory. The system also goes a good deal further, with the inclusion of FireWire and S-Video ports, a DVD/CD-RW combo drive, plus DVD playback and MP3 software.

The HP unit was not the last mobile Pentium 4 notebook we saw, however. That distinction goes to the A515, which IBM introduced in early March, around the time those Intel announced the mobile Pentium 4 processor. The A515 model came in ATI Mobility FireGL 7400 graphics card with 64 MB of DRAM memory and OpenGL support, and a 15-inch screen that displays up

to 1024x (1400x1,200 pixel) resolution. These are all big bets by IBM's target market—the mobile workstation crowd. It has a price tag to match.

PC shipments in Canada declined seven percent in 2001 compared to 2000, but that could have been more dismal were it not for the uptake in consumer notebooks.

And just when we thought that 15 inches was the largest practical screen size for a notebook, along comes Sony with its VAO GRS70 sporting a huge 16.1-inch display. Most people who saw it exclaimed how big it was, and, at 3.8 kg (8.5 lb), heavy too. The keyboard

deck is very clean, almost stark, adding to the mobile-like impact.

One feature many manufacturers are categorizing into notebooks is an 802.11b wireless antenna. The position of the antenna—usually in the lid beside the display panel—improves reception. As access to the Internet becomes a more mainstream activity, the opportunity to surf in many more places will be enhanced by wireless.

What this gets down to is that notebook computers have become interesting again. Depending on your lifestyle or work habits, a notebook computer will allow you to do what you want to do in more places. And with summer just around the corner, getting out of the office while still maintaining some semblance of productivity has got to be appealing.

Enjoy the snow!

David Tausk, Editor

## The Computer Paper VIP Award

The Computer Paper announces a new award to recognize outstanding digital technology products: the VIP Award. The VIP Award will be given to

the way we do things.

products that HP Editors consider as affecting the boundaries of performance, design, or value. VIP could mean:

- **Very Impressive Product:** Each year, the editorial department reviews scores of hardware and software products. The most impressive of these will get the recognition they deserve.
- **Very Important Product:** Products that change the way we look at a particular category, or even redefine



- **Very Innovative Product:** Some products do things in a novel or innovative way, ways we would never have expected.
- **Very Interesting Product:** Sometimes a product is just so odd, in a good way, that it deserves greater recognition just for trying something different.

**VIP and Editor's Choice:** The VIP Award will join The Editor's Choice as one way of saluting innovation and performance of personal computing products and services.

## The Computer PAPER

Canada's Computer Information Source

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## LETTERS



### More on that CD tariff

I read in the Letters section of your May 2002 issue about the new tariff proposed for recordable media. Under these tariffs, the Creative Labs Nomad Jukebox

would increase in price by \$450. A 20-pack of blank CDs would increase by \$10 to \$18. In both cases the prices basically double!

In the government's out of touch with reality that it thinks these tariffs will do anything except enrage people and raise the sales of many products?

I happen to be native of B.C. studying music at the University of Toronto and an amateur composer. I cannot afford such price increases.

The government says it wants to protect Canadian music.

Am I less of a Canadian than any major recording artist or record label? According to the government, yes. If the government truly wants to protect Canadian music it can start by banning away this useless, even offensive, idea. It only hurts the very musicians it claims to be protecting.

Mark Andrews

### Two big Maxtor

In the April letters column, there was a question about oversize Maxtor hard drives and how to handle the problem.

My suggestion: just use E-z-Drive, a program from Maxtor that will enable the person to use his large hard drive on an older machine.

It can be found on the company's Web site along with a phone number for customer support. BTW, their support is great!

Eric

### A prescription for the IT industry

The computer industry seems to be invading all and here's why. Bill Gates et al. never bothered to ask the users: What do you want to see in a computer? What do you not want in a computer? What do you want changed in a computer?

Until the manufacturers get user input for their products, it's going to be all downhill from here on.

Jack Pearson

### Clarification of DDR

In "Faster components make faster computers" (TOP MAY), Sean Conrath wrote: "ALi's Magic 1 chipset, SiS's Ultra 645 and VIA's KT333 are three of the chipsets which accommodate 333 MHz DDR."

There are reports that some boards with B0R333 support may accept a maximum of two sticks of the memory, and adding a third stick may cause the memory to drop back down to 266 MHz—we haven't been able to confirm this yet, but we will certainly try to as soon as possible."

soon as possible."

In response to this, Erin Haffley, spokesperson for memory manufacturer Crucial Technology wrote to clarify.

"The SiS's Ultra 645 is the only chipset we can confirm with this issue."

"According to the documentation we've received from ALi's Magic 1, it doesn't seem to be capable of using Crucial's PC2700 DDR memory—this might be overloading the chipset to make PC2700 work, which could lead to issues."

"VIA's KT333 should have PC2700 modules without a hitch." □



### Logitech unveils slim digital camera



Logitech ([www.logitech.com](http://www.logitech.com)) has introduced a credit-card size digital camera that is just over 1 cm (0.4 in.) thick and has a brushed aluminum finish.

The Logitech Pocket Digital can hold up to 52 images at a max. lens 1.3-megapixel resolution. It has a built-in lithium polymer battery that recharges through the USB cable each time the camera connects to the PC to download images.

Logitech says its AutoIris image processing feature ensures that the Pocket Digital can capture images containing a mix of bright and dim areas. The camera ships with Logitech's Pocket Digital 5.0 software, which includes MGI PhotoSuite 4.0 SE for editing and email images.

The Pocket Digital has a list price of US\$125.95.

—TUP Staff

FLUENT announces two new FinePix



megapixels, and offers 30 optical and 4 x digital zoom. It's shutter speeds range from 1/2 000 of a second to three seconds, and adjustable ISO sensitivity of 100/200/400 can be extended to ISO 800/1600 with the camera's high sensitivity, one-megapixel mode.

The camera is also capable of continuous shooting, with maximum speeds of 1.5 frames per second (fps) in one-megapixel mode and 5 fps in six-megapixel mode.

Users can attach voice notes of up to 30 seconds to each photo. Fujifilm said the camera can also record up to 33 minutes of audio on a 16 MB SmartMedia card, or up to nine hours using a 128 MB card.

The F800 Zoom can also capture XVi digital video with sound at full VGA (640x480) and QVGA (320x240) resolutions at 15 fps.

The FinePix H40 Zoom has an estimated retail price of \$659.99. A PictureCable—which in addition to syncing photo, audio, and video files to a PC and recharging the batteries, allows the camera to be used for video conferencing—is available separately for an estimated \$255.00.

The FreePa 30 is a pocket-sized camera capable of capturing up to 2.3 megapixel images and saving as a portable MP3 player. The included 16 MB SmartMedia card stores up to 20 minutes of music.

the camera measures  $\{A_0^T, A_0\}$  cm ( $\{L_0, h_0, b_0, l_0, p_0\}$ )

and weights that fit in a camera's without a camera. Like the F601, it can attach to a second video camera to accompany each photo. It can also be used as a digital audio or video recorder that captures up to 20-second clips of A/V video with sound. Hooked up to a computer, it can also be used for videoconferencing.

The 32 comes with a built-in music control system via scroll-through photo, display the titles and artist names of MP3 tracks, and even take photos of themselves. It has an estimated retail price of US\$399.

PC\* 25mT



Fun Photo Film ([www.funfilm.co](http://www.funfilm.co)) has released two new digital camera models, the FinePix 1601 Zoom and FinePix 30.

The F60i Zoom includes a third-generation Super CCD sensor system that can capture images of up to six

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TABLE 10-10 (continued)

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# WHAT'S NEW

## New Q-pads encase PDAs, keyboards

ThinkDevice ([www.thinkdev.com](http://www.thinkdev.com)), has unveiled an all-in-one keyboard/case/stand for HandSpring Visor Edge and Palm OS PDAs.

The accessory, called the Q-pad, is a thumb keyboard built into a slim leather case about the size of an ordinary PDA case, measuring about 7.6x5.2x0.3 cm (3x4x1/8 in.). A PDA attachment mechanism is on the inside of

the case and the keyboard on the other side of the lid. The attachment side also has a spring-loaded hinge that flips out to become a viewing stand for the PDA when placed on a desk. The case provides access to the expansion slot on the Visor Edge. All of the electronics are within the protective case.

The thumb keyboard is a full QWERTY keyboard with a separate numeric keypad. It runs on the PDA's internal battery. A special circuit shuts it off so it won't drain power when not in use, according to ThinkDevice.

The Q-Pad comes with Windows and Mac OS driver software, and a one-year manufacturer's warranty. It has a suggested price of US\$69.99.

—JCP Staff

## Ultra-personal computer plays three roles

QOO ([www.qoo.com](http://www.qoo.com)) unveiled its first product, an "ultra-personal computer," at WAREC 2000 (Microsoft Virtual Windows Hardware Acceleration Conference) held in Seattle, Wash., in April.

The company says the device (QOO) measures 12.4x7.3x0.3 cm (4.9x2.9x0.1 in.) and weighs 100 g (3.5 oz). It is a highly mobile PDA and versatile handheld computer that can be used as a stand-alone Windows XP

microserver, is powered by a Celeron TM500 processor (clocks of speeds up to 1 GHz), 256 MB RAM and a 30 GB hard drive. It has a 4-inch VGA-panel color LCD with touchscreen and a built-in connectivity options including FireWire, USB, audio, IEEE 1394, a proprietary port, Bluetooth and Bluetooth.

The device can be used as a stand-alone, as a notebook when connected to an OSD-dropped monitor, as a desktop PC when docked into a cradle with a standard screen and keyboard.

After years of designing Apple and IBM laptops, the QOO team felt the time had come for the next step—but



Spotlight



## Software for lean thinking

Lean Enterprise ([www.leanenterprise.com](http://www.leanenterprise.com)) has unveiled a new software package for lean thinking. The package is called Lean Enterprise 2.0.

The package is designed to help companies implement lean thinking. It includes a number of tools and templates that can be used to design and improve lean processes.

The package is designed to be used by a single user or a team of users. It can be used to design and improve lean processes in a number of ways.

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Spotlight

QOO says it will be available commercially in the second half of 2001.

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# Lively programming for the Web

Flash set the stage, now more are gyrating to SWF

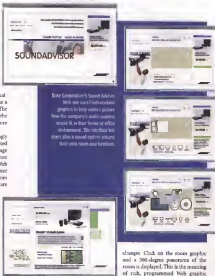
By Jacques Surryer

Web designers have always found ways to deliver graphics most effectively, using techniques like interlacing, progressive loading, and dithered slicing. Programs such as Adobe Image Ready, Adobe Photoshop, Corel PhotoPaint, Deneba Gears, and Macromedia Fireworks all have the ability to divide a large image into rectangular slices. These slices are sent out over the Internet individually by their automatically reassembled like a puzzle on the browser's Web page. The smaller the size of the slices, the more the Web's backbone and firewalls store effectively than larger files.

As dynamic sites became increasingly common, Web designers are confronted with a new problem: dynamic page interfaces become more costly because they increase network traffic. So Web designers are looking for ways to reduce Web page traffic. Again old techniques such as using frames and footnotes are revised because with these, only a targeted portion of the page has to be transmitted. But perhaps the most important trend in Web page design is the use of animation and programmed graphic objects.

The idea derives from dynamic HTML forms, where only the content of the forms—and not the components themselves—is refreshed. In a similar fashion, graphic objects like buttons, menus, and animations use scripts to control the graphics after initial download. The scripts manage a graphic's different looks or data transfer—when the appearance of a button changes when the cursor hovers over it, for example.

Dynamic components such as HTML forms, animated rollover buttons, etc., are now common features of many Web sites. While these script-driven dynamics are typically restricted to components, such as buttons and menus, Macromedia Flash and Shockwave have taken programmed graphics one step further by allowing for complete artistic control of all elements of their screens.



Bob Corporation's Sound Advisor Web site uses Flash-based graphics to help visitors picture how the company's audio systems would fit in their home or office environment. The interface lets users plan a sound system around their own room and furniture.



With Flash, Macromedia has consistently been the first developer to add programming control to rich multimedia objects, such as animations, videos, and audio. Not only can users start, stop, synchronize, and change the properties of multimedia events, they can also link the graphics to data processing.

Some users and smart sites exploit this rich interaction. You can click on a calendar date and the available rooms are displayed, maybe even with a graphic of the floor plan. Change the room style and again the room graphics

change. Click on the room graphic and a 360-degree panorama of the room is displayed. This is the meaning of rich, programmed Web graphic objects.

The latest version of Flash, called MX, pushes Flash's versatility further. With its many prebuilt components, it can act not just as an animation and multimedia stage but also as a very competent data form. In fact, in addition to textfields, buttons, checkboxes, and many data form elements, Flash MX has advanced tree components and double lists, as well as media array components like chat boxes, narration panels, video panes, synchronized sound, and Webcast containers.

Macromedia Flash MX has three

designer-side improvements worthy of note: video support including the ability to add animation effects to QuickTime or Windows Media Player clips; a free timeline tool that allows for easy slicing, scaling, and distortion of objects; and as part of a tweening and timeline improvements, including layer folders, distributed copies to layers, and multiple frame operations like cut, paste, and paste.

Macromedia is arguing that Flash MX should be used in the complete Web page builder in many situations. And this argument carries some weight. To begin with, the Flash file format, SWF, delivers very compressed programmed graphics and animations. The scripting language for Flash, ActionScript, is a JavaScript subset, so it's familiar to millions of Web designers and developers. A host of competing developers are now producing extensions in SWF file format or have adopted ActionScript for programming their animations.

There are two pertinent questions, though: is Flash fast enough, and does it have wide distribution and acceptance in the market?

In regard to compression is very good. Tests show that Flash SWF files are 50 to 70 percent smaller than GIF animation or PNG indexed files using the same content. In fact, the higher the graphical content, the bigger the advantage in Flash SWF compression.

As well, Macromedia claims the Flash plugin is loaded by default in 98 percent of all browsers worldwide (over 400 million). But Macromedia does not rely on browser plugins as the only means of delivering Flash content. Macromedia has standalone players for delivering Flash animations (SWF files) on all versions of Windows, Mac OS 9.x and OS X, Solaris, Linux, and SGI Irix. Flash is also used on many new mobile devices such as Nokia handsets, Windows CE PDAs, and cell phones using the Symbian OS.

In short, Macromedia has created a very attractive case for Flash, not just for graphic animations but also for form-

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## Live programming for the Web

Continued from page 14

based data processing with a media savvy twist. These firms can readily incorporate Webcam or video broadcasts and/or graphic animations.

### Others join the Flash dance

However, Macromedia has to watch out because Adobe and other developers are improving their Flash animation capabilities by leaps and bounds.

Adobe After Effects 5.5 is a professional-caliber video compositing program that allows Flash SWF file input and output, along with support for Alias|Waveform Maps and discrete 3d max importing 3D models and animations from both programs. The ability to do TV broadcast-quality text and figure animations, with complex non-linear paths and effects makes After Effects a cut above Flash and even Adobe's own LiveMotion 2.0.

Another advantage of After Effects is its ability to output to several formats including SWF, GIF animation, QuickTime, MPEG, and RealMedia video.



Adobe LiveMotion 2.0 (from the top) timeline, dialog, and script editor interfaces.

Adobe LiveMotion 2.0 borrows the

After Effects timeline, which has many ease-of-use features. LiveMotion also has control creation tools, such as colour and lens effects, and a wide range of transformations and specialized paste operations. However, most important (and unavailable in After Effects), LiveMotion has not just adopted Flash ActionScript, but set the state of the art for its script editor and online debugger.

Users can add sophisticated interactivity to SWF animations, then export to Flash, Adobe GoLive, or standalone players. The ease of animation and scripting, and the ability to export After Effects animations directly, gives LiveMotion 2.0 a design advantage relative to Flash and the other Web animation tools.



Corel RAVE's interface.

Corel RAVE (Real Animated Vector Effects), which is part of the Corel Draw 10 Graphics Suite, D3D Sweh 2.0, KoolMoves 2.71, Swift3D, and Toon Boom Studio share a common feature: the ability to produce automated animation using wizards or tweens, which can then be output as Flash SWF format.

What about the old standbys, GIF and PNG animations? Typically animation loops of five or more frames are 50 percent smaller in Flash SWF format. As well, SWF format is functionally much more capable with ActionScripting. SWF can also be delivered as a standalone executable file.

In short, Flash SWF format has become the de facto Web animation standard for the time being.

### Video and 3D

Video can be thought of as animation with sound going at 24 frames per second. Some Flash SWF developers make video this way. Using tools like Macromedia Generator, KoolMoves, or Toon Boom Studio, they generate their movies or cartoons, establishing the spots or keyframes, then letting the tool

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# SVG coding as easy as drawing

By David Sinala

If scalable vector graphics (SVG) turns out to be as big a deal as Internet acers anticipate, WebDraw has a bright future. Just WebDraw 1.0 is the first dedicated SVG editor we've looked at, and it has been a blast to use. We found it very easy to produce simple vector graphics and animations, and the program's straightforward interface encouraged us to tackle more complex projects.

## Just WebDraw 1.0

From: Luc Software

www.luc.com

Price: US\$179 (download), US\$199 (box)

This program is to Web vector graphics what the first graphical HTML editors were to Web page construction. It provides an intermediate visualization layer, so you can see what you are creating. But all the while you are creating shapes, colors, and movements, the program is producing the SVG coding for Web browsers to interpret.

WebDraw's workspace is reminiscent of Macromedia Flash or some video editing interfaces, with a tabbed working space, a timeline, and tabbed menu panels to manipulate properties. The workspace holds three views: Canvas is the main creation area; Source shows the SVG coding underlying graphics; and Preview displays what the file should look like in a Web browser.

You create vector images and manipulate them as you would in any illustration package. The toolbar includes drawing



Just WebDraw 1.0's interface (above) and frames from a simple animation depicting a sunrise (right) created with the SVG editor



tools to make basic shapes and curves, and you can edit curve nodes as you would in other drawing packages. WebDraw supports gradient fills and patterns, and includes a small set of effects.

To animate objects or transform properties such as size, shape or color, you create keyframes that establish beginning state properties and end state properties (as well as any intermediate steps) on the timeline. The properties you can manipulate include position, size, shape, and hue.

The distance between keyframes on the timeline editor establishes the length of time it takes for the transformation.

So far, this will be familiar ground for

anyone who has worked with video editing or animation software, or a composition program like Flash. When it comes to moving your image, however, the Web-specific nature of this application becomes clear—your output is an XML document that uses the SVG document type definition (DTD).

While you are working with the graphics, WebDraw simultaneously writes the code that describes those objects and their behaviors. You have access to this code at any time by hitting the Source tab on the main workspace—the same way you switch between layout and HTML views in a program like Galileo.

One of the advantages of having access

to the source code is precision; you can, for example, specify the exact size and position of your objects. In the case of WebDraw, having the source view is also useful for clearing up the document, since the application records your every manipulation as a transform calculation—whether it's pertinent to your final product or not.

For example, if you wanted to make a 100x150 pixel rectangle starting in the upper left corner, you might first draw a shape of indeterminate size and position, then refine it by anchoring it and moving it appropriately. This means you fuss with the object, the longer your document becomes. The simple solution is to go to source view and type in the exact co-ordinates and dimensions—and delete the record of any irrelevant transform calculations.

This is a version 1.0 product and it exhibits a few oddities. For example, a couple of times text not supported (PFB) comments simply vanished off the canvas, never to be found again—although they were still listed as components.

WebDraw saves files with an SVG extension, and these files can be opened for viewing in a Web browser that supports this format. Adding one to an HTML page can be accomplished using an "embed" tag indicating the location of the SVG file.

The package we received came without a printed manual, but there is a basic online help and tutorial system. Overall, the interface is not that complicated—it allows you to get started with SVG as a relatively painless way. Mastering the breadth of SVG is a much longer task, and there is a learning curve to understanding

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## 50% ceiling as early as discussed

Continued from page 10

how a timeline works or what *Timeline* tools can do. However, WebCivv will not be totally foreign to anyone who has worked with an illustration or video editing program—or Flash.

After an evening of experimenting with WebDraw, I figured out enough basic procedures to create a simple animation using three shapes and some text. The animation depicted a sunset, with a dark landscape and sky that brightens as the sun rises, with "Good Mornin'" appearing in from the sky.

To get the dark green ground and dark blue sky in brighter, I used a hue transform, setting two keyframes for dark and then light hues. The circle representing the sun was layered behind the ground rectangle but in front of the sky block, and was animated to cover upward from behind the ground layer. Near the end of the animation the text scrolls into frame.

The three-second animation took just a handful of statements to execute. Below is the code `WebDraw` generated to describe the use of the `sky` object and its transformations from dark to light blue.

[illegible]

It's not difficult to figure out what's going on. The first two lines describe the size, position, and fill colour of the rectangle, while the rest describe the type and nature of the animation. Having come to this, you could easily modify the colour or size, for example.

Similar statements describe the ground object going from dark to light green, the sun object rising and the text object scrolling in. As you can see, this is a pretty efficient way of delivering graphics and animation to the Web.

We expect that Flash will maintain its dominance for some time, but as more SVG tools like WebDraw enter the market, perhaps integrating multimedia capabilities through SMIL (synchronized multimedia integration language, which, like SVG, is an XML application), there'll be another option for creating sound and flare on the Web.

A trial version of WebDraw can be downloaded from [www.hill.com](http://www.hill.com). □

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# Guide to understanding SVG

By Keith Schengili- Roberts

Scalable vector graphics (SVG) is a relatively new Web specification from the World Wide Web Consortium for exporting graphic images via code. The interesting thing about vector graphic files of any type is that they are scalable—you can make such a file as big or as small as you like without losing resolution. Unlike bitmapped images—like GIFs or JPEGs—SVG images are code embedded in a Web page to describe and create the image the Web browser then draws. Hence, it is much smaller than an equivalent bitmapped graphic.

## SVG Essentials

Authors: David Gonsky, Publisher: O'Reilly & Associates  
www.oreilly.com  
ISBN: 0-596-00225-6  
Softcover: 2002 335 pages  
Price: \$29.95

## Rating:

Information content \*\*\*  
Readability \*\*\*  
Usefulness for intermediate / expert  
Overall score \*\*\*

Web authors will recognize the parallels inherent in SVG: scalable images that look good at any resolution, are relatively easy code-wise, and download quickly. If you're interested in learning about what is likely to become a popular Web graphics format, SVG Essentials is worth a look.

SVG is based on XML code and uses some CSS elements for formatting. The underlying code is easy to read and understand. Anyone familiar with XML basics (or HTML for that matter) will find the subject presented at a very acces-

sible way in this book. J. David Eisenberg begins by describing XML and SVG basics, then proceeds through simple code examples to draw a basic picture of a cat's face. While the resulting image is somewhat cheesy, the exercise provides a basic understanding of what can be done with SVG code, and the power behind it.

The book then goes on to lay down SVG fundamentals: understanding coordinate space, creating basic shapes such as lines, circles, rectangles, and polygons, structuring your code, and inserting images within SVG code. It then moves on to more complex subjects, such as producing arcs, curves, patterns, and gradients. The book provides numerous examples of how to apply text to an SVG path, so it follows a curved or bent line. Further sections on topics like masking, filters, and lighting cover all the static graphic effects. What makes SVG so exciting is that it lends itself easily to animation effects—making it a challenge to flash in some ways. This topic is surveyed in another, rather brief, chapter.

Coding SVG by hand, though, rapidly

becomes a chore, and the rest of the book delves into creating SVG output automatically via programming. It looks at converting XML code to SVG via Perl, or programmatically via Java, and describes ways you can use XSLT to transform XML data to SVG code. This section takes a great leap ahead technically and is aimed at experienced programmers.

This book is aimed primarily at those who either want an understanding of SVG to programmatically transform XML data into SVG, create SVG files directly from an XML editor, or to be able to serve SVG graphics over the Web. The book assumes a basic familiarity with XML and more than basic programming knowledge. If you want a simple primer on SVG, this isn't it.

At the moment, there are very few books on SVG, and while I wouldn't recommend this one to anybody who is looking for an easy primer on the subject, those who want entry-level info on this emerging Web graphics format will be disappointed to find something better—at the moment. □

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## Hands On

Lab Test • Hardware Evaluations • Software &amp; CD-ROM Reviews

## Mobile multimedia

TCP Lab finds a lot to like as notebook makers pump up the audio and graphics subsystems

By Sean Carrolls

Opting for the portability of a notebook has always meant making a few sacrifices, notably in terms of performance and multimedia ability. But everything shrinks and more and more higher performance components are becoming small enough to squeeze into a notebook case. This has made it possible to bring high-quality audio and graphics to the mobile world, as well as CD burners, FireWire connectivity, and wireless networking.

This month, we've brought together a sampling of some of the most recent multimedia-ready notebook computers. We've tested each of them in three ways.

**PCMark 2002** tests a computer's subsystems, including CPU, memory, and hard drive. With PCMark 2002, higher



numbers represent better performance. The program is a free download from [www.seemetrics.com](http://www.seemetrics.com), with additional features available in the Professional version (\$40 download, \$50 for the CD).

**3DMark 2001 SE**, also from [MadOnion.com](http://MadOnion.com), tests a computer's graphics subsystem, again with higher numbers representing better performance. This test determines a computer's suitability for 3D gaming—admittedly not precisely a strength of notebook computing. A few of the machines this month may surprise you, though.

**SVMark 2002** is our standard system benchmark, and is a joint product of MacOnion.com and BAPCo ([www.bapco.com](http://www.bapco.com)). This benchmark tests a computer's performance running a series of applications, alone and simultaneously, which is a more realistic representation of the way a typical person uses a PC. Again, higher numbers mean better performance, but note: these numbers should not be compared.

Continued on page 30

## HipFlics offers quality video compression

By Justin Simons

Hipflics is even easier to use than LiveSlideShow—a fixed-time presentation tool from the same developer. However, R/L-based Intel Hip Software Hipflics, though, performs only one function: QuickTime video compression.

Hipflics



From: TotalHip Software Inc.  
[www.totalhip.com](http://www.totalhip.com)

Price: \$299  
(download or box,  
Mac or Windows)

There are several other products—such as Squeeze and Compressor—that allow you to compress files in a similar manner. Hipflics, however, sets itself apart in several ways, including being the lowest-priced tool to offer professional-quality output and being the first one available for OS X (Compressor Squeeze is just now available for OS X, too). On the single desktop you get both an OS X/OS 8 and a Windows version of Hipflics.

It is designed for those who use iMovie, FinalCutPro, or other video-editing packages. Once you've created and output a final project, you often need to

Continued on page 35

## PC or TV?

Samsung's new multimedia monitors offer a bit of both

By Sean Carrolls

During a recent press briefing, we were reminded that convergence of home entertainment and computing continues, with a prediction

suggest it's right on the money—one of the companies that has recognized this trend is Samsung, which has already released a few TFT monitors incorporating television and video input.

**Samsung SyncMaster ImageMAX 151MP and 171MP**  
From Samsung Electronics Canada  
[www.samsung.ca](http://www.samsung.ca)  
Suggested price: \$999 (15MP), \$1,199 (17MP)

Two of Samsung's newest multimedia monitors are the SyncMaster ImageMAX 151MP and 171MP. Designed, they resemble previous Samsung models, but are now also available in a "champagne

gold" finish instead of only silver. Both models feature a base that folds out from the back of the monitor for free-standing use on a desktop, but can be tucked up right against the back if you'd rather mount the monitor on the wall with a special mounting plate.

Both monitors offer multiple signal inputs, for maximum flexibility. The standard VGA connector is onboard, as you'd expect for a PC monitor. The monitor will also handle a few different types of component video input, including S-Video, RCA, and DTV (Digital TV). It also has a removable CATV module. Both models feature a picture-in-picture

Continued on page 34



that flat-panel TFT screens would continue to infiltrate the standard television screen market. If that's true—and we

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## EVP Test Lab: Notebook survey

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Windows OS	XP Home	XP Home	XP Home	XP Home	XP Home	XP Home	XP Home	XP Home	XP Home
Processor	1.4GHz P8600	1.6GHz P8600	1.6GHz P8600	1.6GHz P8600	1.6GHz P8600	1.6GHz P8600	1.6GHz P8600	1.6GHz P8600	1.6GHz P8600
Installed memory	2GB MB	2GB MB	2GB MB	2GB MB	2GB MB	2GB MB	2GB MB	2GB MB	2GB MB
Maximum memory	4GB MB	4GB MB	4GB MB	4GB MB	4GB MB	4GB MB	4GB MB	4GB MB	4GB MB
Screen size (in)	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
Screen res. (pixels)	1280x800	1280x800	1280x800	1280x800	1280x800	1280x800	1280x800	1280x800	1280x800
Web cam	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Default drive	DVD-RW	DVD-RW	DVD-RW	DVD-RW	DVD-RW	DVD-RW	DVD-RW	DVD-RW	DVD-RW
CD-RW combo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bluetooth	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FireWire	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PC Card slots	2	2	2	2	2	2	2	2	2
Ethernet	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Modem	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Printing device	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Graphics	ATI Mobility Radeon	ATI Mobility Radeon	ATI Mobility Radeon	ATI Mobility Radeon	ATI Mobility Radeon	ATI Mobility Radeon	ATI Mobility Radeon	ATI Mobility Radeon	ATI Mobility Radeon
Audio	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
USB ports	4	4	4	4	4	4	4	4	4
FireWire ports	1	1	1	1	1	1	1	1	1
Video out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Serial port	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Parallel ports	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Internal port	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PS/2 mouse/keyboard	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other ports/ports	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Mobile multimedia  
Continued from page 12

- Windows 2000 Professional (Windows XP optional)
- 1.6GHz Pentium III mobile (1.3 GHz and 800 MHz also available)
- 1GB MB memory

- 20 GB hard drive
- DVD drive
- 14.1 inch TFT display
- Multitouch dot on side of screen can take special attachments, including wireless networking and Bluetooth

Though the Compaq brand name may be uncertain while Hewlett-Packard's acquisition of the company is up in the air, for now we have a number of products available, including that one. If you're ready to see the DVO series has a special plastic case on the rear of its TFT screen (as, on top of the notebook when the screen is closed) that can be replaced by add-on modules. This slot is called a MultiPort. It's a pretty basic innovation to what is a pretty basic and businesslike notebook, allowing you to add things such as wireless networking, Bluetooth, or even a smart card reader.

Otherwise, the DVO NoteBook doesn't strap you for free standard Compaq

notebooks, with upward-of six cameras, a docking port on the back, and dual-link-up mouse buttons (both on the top and bottom of the TouchPad). It comes with Windows 2000 pre-installed, which makes it less machine-friendly than notebooks with XP. However, it still fares pretty well in most of the benchmarks. At the very least, scores indicated the machine's overall performance could perhaps benefit from a faster hard drive. Still, numbers were reasonably good, with modeling 3D performance (which is more than we really expect for a notebook with a more corporate focus).

The DVO comes with a number of Compaq management and utility programs, as well as Acrobat Reader, Adobe Reader, and DVD playback software. DVD playback was quite good, though the built-in speakers weren't overly loud. The headphones, however, and it's a nice multimedia

touch to what otherwise is a fairly solid business-oriented machine.

## Dell Inspiron 2000

From Dell Computer Corporation  
www.dell.com

Estimated price: \$1,000

- Windows 2000 Professional
- 1 GHz Pentium III mobile
- 256 MB RAM
- 20 GB hard drive (10 and 40 GB available)
- 14.1 inch TFT display (15.1 inch available)
- DVD-RW drive (CD-RW and DVD-RW combo drive available)
- Cabinet floppy drive
- Software includes InterVideo WinDVD Master Edition, and Dell accessories

As one of the only notebooks this month with a floppy drive on board, the Dell Inspiron 2000 is definitely old-school in some ways, including a very familiar and comfortable design, as well as its old

Continued on page 16

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« HANDS ON »

### Mobile multimedia

Continued from page 35

school (lower) price point. As with all



Dell products, you can configure almost every aspect of a notebook, processor, hard drive size, optical media drive, size of the screen, and more.

Hardware-wise, there isn't a lot in the way of multimedia extras on this system, though it does have a DVD drive onboard and includes playback software. DVD playback is pretty smooth, but the picture isn't too glossy on the TFT screen, which is generally a bit coarse but suitable for most applications. The configuration we looked at is perfectly good for general use, but those looking for more multimedia performance may want to upgrade the options using Dell's site, that's fairly easy.

As it stands, you may have to configure your own—one of the problems we always have reporting on Dell products is that by the time this article goes to print, Dell will have refreshed part of its line to reflect the newest components. We spoke briefly with a Dell representative and we were told that this line is likely to be replaced by the 2650 series, which will incorporate a 3.4 GHz Pentium 4 Processor-M, switch to Windows XP (home edition), and opt for a Video GeForce2 Go 100 graphics instead. This new version will be slightly more suitable for 3D, but not quite as good as the GeForce 4 Go chipset. The laptop 2650 configured as the 2680 above (apart from the processor and OS) will run \$2,219, and upgrading to a DVD/CD-RW combo drive will bump that to \$2,419. Either way, it's still a very competitive price point!

### European 5400 Mobile Carlo

For: Europe Corp.

Continued on page 38

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## Mobile multimedia

Continued from page 45

way up to 1,600x1,200. It seems that up with aVista GeForce 440 Go graphics, at the top end of the mobile graphics category. Understandably, the Satellite 5000 is right at the top of the heap in the 3DMark 2001 benchmarking. The machine also ships with a DV/HD-D-RW combo drive, and one FireWire port so you can use it with your DV camera, to make your own movies.

A set of controls along the front of the machine makes it possible for you to listen to CDs even when the notebook is powered down. For those with digital media devices or digital camera, both SmartMedia and SD/MMC slots are built in. It also has an excellent set of speakers, which make the notebook sound great without having to plug into external speakers.

The laptop even with all of these excellent features, the notebook comes in just under \$3,000. If we have a complaint about this system, it's that Toshiba includes a TouchPad instead of the AccuPoint controller found on a number of other Toshiba models, but it's only a minor distraction on an otherwise nearly flawless notebook.

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Continued on page 48

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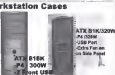
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# Small Office Technology

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## Data lost, data found

Tales of recovery from CBL

Due to the sensitive nature of this subject, no personal, corporate, or government names appear in anecdotes.—Ed.

By Dave Chiappelle

From a Central American country recently ravaged by earthquakes, a package arrived at the Markham, Ont. office of CBL Technologies ([www.cbltechno.com](http://www.cbltechno.com)). A tired and stressed Central American IT worker had ordered mail-covered and waterlogged hard drives he found (a sound strategy for some preservation operations), but either forgot or didn't realize that ice expands. Thus, a new disaster: ice had pressed the drive heads against the platters, rendering them completely unusable.

Though the drives arrived at CBL covered in salt and in various stages of thawing (not, that story had a happy ending. The CBL data recovery team was able to extract data from the drives).

CBL, which now has locations around



the world, didn't start out as a data recovery business. Initially, president Bill Margerson and his partner Zhenyong

Chang fixed floppy drives and occasionally hard drives until one customer kept returning, asking them to recover data from damaged drives. Other data recovery companies wanted \$1,000 merely to look at a drive, and thousands for the actual recovery. So Margerson and Chang switched from repairing storage media to recovering data.

There is no operator's manual for data recovery: each client has a different priority. A high-level of secrecy may be important to one client, while the speed of recovery is more critical for another.

As well, there is no single cause for data loss. In addition to mechanical failure and human error, virus attacks are a major cause. Interestingly, CBL says its servers are attacked daily by hackers trying to take down the company that hosts websites. Though CBL can't say how it protects its servers, it says hackers have yet to succeed.

*Continued on page 52*

## Canadians warming to e-commerce

OTIMISM, Ont.—After a somewhat slow start, online shopping in Canada is poised for healthy growth over the next five years, say analysts at the Yankee Group ([www.yankeeconsult.com](http://www.yankeeconsult.com)).

However, a new report based on the Yankee Group's consumer surveys also shows that Canadians haven't abandoned all fears of losing out on credit card information. In fact, concerns over online security appear to be hardening among those who still refuse to shop online; the analysts found.

The company's report on business-to-consumer sales online, entitled *A Look at Canadian B-to-C E-Commerce*, says those transactions will climb to 4.8 million households in 2004, from 2.5 million households in 2001. The 2004 transactions will represent sales of \$11.5 billion, compared to 2001's \$1.2 billion.

Tessa Nanka, who authored the report, said Canadians have been leaders in adopting electronic commerce in the form of bank machines and, later, Web-based banking.

However, she said, the country has trailed the U.S. in business-to-business shopping online, in part because Canadian retailers have been slower to match the offerings of their American counterparts.

Nanka and growing Internet access among Canadian households is helping to change that, along with evidence that veteran Internet users are the biggest spenders online.

The surveys found that just 18 percent of online shoppers had what would be considered high-speed access, though among users online for more than three years, that figure climbs to 75 percent.

Internet shoppers online less than a year spent an average of \$185 in the last 12 months, compared to an average of \$266 for those online more than three years.

*Continued on page 52*

## PowerPoint from top to toe



When you've created the basics of a PowerPoint presentation, you're ready to add elements that begin and end your presentation in style. The start screen is the slide you display as your audience is

gathering. The agenda screen shows your audience what you have planned. They see important steps in polishing your presentation. Finally, the ending screen is displayed when your presentation is complete—you may still be talking when

it's displayed, so it's very important, too. This month, we'll look at the neat effects you can create for these important slides to keep everyone focused on your presentation.

### Closing credits

Everyone is familiar with the closing credits at the end of a movie, which list everyone who had a role in bringing it to life. Likewise, there are sure to be people whose contributions to your presentation you want to acknowledge. Why not add a list of credits at the end and have them scroll up the screen, movie-like?

To create your credits, add a new background slide to the end of your presentation. Click on the text box that will contain the slide title and remove it by clicking Delete. Now, use the remaining text box so it fills the entire slide. Into this, type the name of everyone you contributed to the presentation. You can do this as a simple list of names or add a description of each person's role.

When this is done, right-click the text box with the names and choose Custom Animation. In PowerPoint 2000, choose the Effects tab, select *Scroll* from the dropdown list, and pick the *From Bottom* option.

From the *Introduction* Text options, choose *All At Once* and *Disable* the *Continuous* option.

*Continued on page 55*

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## Introducing desktop software that recovers documents automatically.

It's called Document Recovery, a Microsoft® Office XP feature that is designed to automatically save current Office XP documents, spreadsheets, or presentations at the time the program stops

responding, so users don't lose all their work. And with System Restore in Microsoft® Windows XP, you can prevent the loss of personal settings as well, like e-mail, address books or Internet bookmarks. Not that you'll need to rely on these features often: Windows XP is one

of our most reliable operating systems ever (10 times more reliable, in fact, than Windows 98).

For more details on how Windows XP and Office XP can help your company minimize downtime, contact your preferred technology vendor or visit us at: [www.microsoft.ca/desktop](http://www.microsoft.ca/desktop)

Here, time translates productivity since with Windows XP Professional and Office XP, Teradion, a leading manufacturer of value-added optical components, was looking for new desktop technology that would not only allow them to maintain a high degree of innovation in its design process, but would also allow them to respond quickly and easily to future needs. Since upgrading, fatal application failures resulting in lost data or work are now virtually nonexistent. According to IT Manager Ramon Lefrancis, "We realized real productivity increases and saw the remarkable benefits in upgrading our desktops to Windows XP Professional and Office XP."



**Data lost, data found**  
Continued from page 50

There are other factors that complicate the recovery process, too. For example, outside experts occasionally need to be called in.

The general methodology, however, is to somehow create a clone of the damaged drive that is exact in every way, but working condition. It's a challenge, but once done, the cloned data can be manipulated without further harming the original.

The diversity of data-loss scenarios has put CBL in some interesting situations. In one case, a government lost work, and with it, important data. Without the data, an entire industry was in limbo. CBL refused this data recovery job five times because the hard drive had been immersed in salt water for days and the task seemed impossible. Eventually, CBL and its exiled scientists at the University of Toronto, who used an electron microscope to reveal the nature of the materials that had bonded to the drive platters. Based on that, CBL was able to use the proper chemicals to remove the encrustation, and data was recovered.

CBL technicians usually operate in a

lab, but there have been cases where they had to work on-site. Recovering data from a 25-drive RAID (redundant array of inexpensive disks) system for a high-security defense contractor in Western Canada, for example, required a CBL team be on site for 24 hours.

During that time, CBL says, the team was under the watchful eye of cameras of both the Canadian and U.S. defense departments. As soon as a team member announced they had data, they were told to leave the room. Simply looking at directory names could have compromised security of two countries, according to the client.

Often, time not money is the top priority in one case, a server belonging to a foreign government agency crashed. CBL recovered the data quickly, routing the drives back to the client. However, custom officers of that country held it up for days.

Not all customers are wealthy, important, or top secret. One client admitted that two Inmate fax cartridges contained contraband proof that aliens had abducted him. His "proof" was recovered, but he wasn't charged.

CBL's client list has also included students who have lost their theses, dissertations, or other projects. The company's

pace for this type of job? A short or other data, emblazoned with the student's school logo. And this business is leak judging from a wall in the CBL lounge that is covered with thank from a variety of schools.

**Skills sets**

Recovering data involves manipulating both hardware and software, but technical expertise isn't all that's needed.

"If you can keep your head while everyone else is losing theirs and blaming you, then you're a data recovery person," says Margeson. "Attitude. That's what it comes down to... It isn't enough to be a good programmer or hardware person. We build on people with special dispositions. Our tests want to be done until 3:30 in the morning looking for data."

To employees, the job can be emotionally charged. As Margeson says, "We're catching people at their worst possible time. Some customers have been so happy to get their data back they've paid hundreds of dollars more."

CBL says its policy is to charge fairly, return data quickly, and stay in contact with the customer (hourly, if necessary) during the process.

One former client, Patrick Hanson, says he was impressed with CBL's service. The president of a custom database company, On Target Tracking ([www.ontargettracking.com](http://www.ontargettracking.com)), Hanson turned to CBL when his notebook crashed during a presentation to U.S. government buyers.

"I had the recovered data in my hand within 24 hours," says Hanson. "I moved all of the data off the drive in the order of importance that I provided them."

Hanson says he now backs up regularly using an inexpensive external system.

In Margeson's opinion, the ease

and affordability of high-capacity backup systems might put an end to data loss, taking a bite out of his business?

Said he, he says that about 100 million hard drives are shipped annually, and even with the current exceptional manufacturing quality controls, roughly 40,000 drives are candidates for failure. So no, he isn't worried.

In fact, CBL has expanded four times since it began recovering data. The failure rate of two well-known hard drive lines has put for two of these expansions. Threat and risk assessment is the newest part of the CBL operation. The process begins by testing backups before they are required.

"VARS [value-added resellers] are subjective, usually recommending and selling components they are familiar and affiliated with. Our threat and risk management is entirely objective," says Margeson.

One such assessment revealed that a company's entire IT budget had been spent on the latest and greatest one-of-a-kind server. The customer didn't realize that restoring backed-up data required a second identical system.

CBL is also called in cases where someone has intentionally tried to destroy data by erasing or reformatting a hard drive. In these situations, the clients are law enforcement officials and the lost data is potentially evidence of criminal activity.

Margeson won't say how many firms are required to completely erase data, nor can he comment on any of these cases. He does say, however, that if it was once on a drive, it can probably be found.

"We love it when the 'experts' say it can't be done. We've recovered stuff IBM and Microsoft have both told us was unretrievable." □

**Canadian warning to e-commerce**  
Continued from page 50

Looked at another way, the Yankee Group said, 17.8 percent of high-speed users were really big spenders—more than \$500 or more in the last year—compared to just 4.4 percent of dial-up users.

The faster connection allows for a more satisfactory experience, particularly given the fact that streaming of multimedia content is becoming increasingly prevalent," the report said.

Hanika said the things Canadians people buy online "are those that can be purchased and consumed without much consideration or research— CDs, videos, books and airline tickets, to name a few."

She said all those products are available from Canadian e-tailers.

"On the other hand, purchases that require more active participation as part of the consumer, such as the purchase of clothing or household appliances, are not as well represented," she said.

—Newsbytes

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# PowerPoint from top to toe Continued from page 55

on the task pane toolbar, which displays as you move the timing bar.)

You'll need to use the Slide Show button to play the slide as you use the first animation sequence since as it will appear in your slide show. The reason you see when you click Play is useful but not accurate—it doesn't play mouse clicks. When you use Slide Show, you'll see as there are places where the animation appears a mouse click you have overlooked.

A final finishing touch is to provide a "The End" slide, or simply to ensure that the last slide in the show will be blank (black). This way, if you're running the show from under PowerPoint, you won't return to the PowerPoint screen when you don't want to. To ensure the last slide will be blank, choose Tools, Options, View, and enable the End With Black Slide checkbox.

## What's your agenda?

An agenda slide is a handy addition to a slide show, allowing you to show your audience the proposed topics for your presentation. The task of creating an agenda slide is best left to when you're near completing your slide show because it can be done automatically at this point and won't need much editing or alterations.

Begin in Slide Sorter view (Choose View, then Slide Sorter) and select all the slides you want to add to the agenda. Go through the title and welcome slides and any credits, which you will show at the end. If you have a large number of slides, you may want to choose only those that begin major sections.

Choose the Summary Slide option and it will create an agenda slide from the titles of the selected slides. It will be titled

Summary Slide. You can now edit this as you want it to appear then move it into position in your slide show.

You may want to refer to your agenda periodically—toward the end of each major section to note progress, for example. To do this, you need to duplicate the Summary Slide, hiding it and linking to it using Action buttons.

Duplicate the slide by selecting it, choosing Insert, then Duplicate Slide. To hide this duplicate, click it to select it, choose Slide Show, then Hide Slide. The slide will still appear in the window, but you'll see its slide number has a slash through it indicating it is hidden.

Open this hidden slide by double-clicking it in the Slides list. To add the Action button—which you'll use to return from this slide to the slide you were viewing immediately before you viewed it—choose Slide Show, Action Buttons, and select the Action Button: Return button (in the bottom-left corner of the palette).

Click and drag the button onto the slide—the bottom-right corner is a good place. When the Action Settings dialog box appears, choose the Mouse Clicking tab, and set the Hyperlink to Last Slide Viewed, and click OK.



The hidden agenda slide has an action button that returns you to the previously viewed slide.

Now, select a slide in a point in the presentation where you'd like to have the option of viewing the agenda—a slide at the beginning of a new major topic, for example.

You'll put an action button on this slide, which you can click to view the agenda again.

To do this, choose Slide Show, then Action Buttons, and select the Custom button (it's the first in the palette and it's blank). Click this to select it, then drag a button shape onto the current slide.

When the Action Settings dialog box appears, choose the Mouse Click tab and the Hyperlink To option. In this box, click the dropdown list, and choose Slide. The Slide Title list will appear, from which you choose your hidden Agenda slide (its number will appear in brackets), and click OK twice.

To label this button so it's clear what it does, right-click it, and choose Add Text. Type some explanatory text such as "View Agenda," then size and position the button on the slide. You can repeat this step as many times as you like throughout your presentation.

When you're done, test how the buttons work by running your show. You'll find that the hidden slide doesn't appear when the presentation runs (which is why you've used a hidden duplicate of your agenda slide—the original still appears in position in the slide show).

Each time you get to one of the slides you've added an action button to, you'll see the button and its text appear. You can ignore it and simply proceed with your presentation or you can click the button to display the hidden duplicate slide.

This slide has a button on it which, when clicked, takes you back to the slide you were viewing previously. You can then continue your presentation.

## Entertaining while you wait

Often, part of your audience will be watching your first slide while waiting for others to enter and take their places. You can give your audience something to look at by creating an introductory slide show that runs automatically.

What you choose to show them is up to you: a series of product photos, new testimonials, or some scenes for your presentation. Whatever you choose, make it visually exciting but simple.

Create a new presentation to contain this animation sequence and add a slide for each of the elements you want to appear at the same time.

Remove any unnecessary titles and text boxes and simply add an image and some text. It's best if they don't look like your presentation, so be creative.

You can add as many slides as you want—they'll be kept as they'll play continuously.

Open the first slide and choose Slide Show, then Slide Transition. Set the timing to Advance Slide: Automatically After and set it to 30 seconds. You may also want to use some form of transition such as checkboarded to bring these items up on the screen.

Repeat this on the following slides, then choose Slide Show, Set Up Show, and enable Loop Continuously Until Esc. This will be a useful filler in case of any delays.

You then need to create a map to break the loop. The simplest way is to add an action button to the first slide that you can use to open your presentation.

To do this, move to the first slide and choose Slide Show, Action Buttons, and select the Custom button. Click it to select it, then drag a button onto the current slide.

When the Action Settings dialog box

Continued on page 61

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## < SMALL OFFICE TECHNOLOGY >

**PowerPoint from top to toe**  
Continued from page 58

appears, choose the Mouse Click tab, then select the Hyperlink To option. Click the dropdown list in this box, choose Other PowerPoint presentation, select your main presentation from the dialogue that appears, and Click OK twice. Reset the action button so it's barely visible and move it out of the way.

When you're done, you can save this presentation and test it. It will play slide

by slide in an unending loop that you can break by pressing I and Esc.

This takes you to the first slide and you can click the button on it to open your presentation.

You can use this filter show with other presentations and have it run while the audience is dispersing. ☐

John Bradley operates an eating bench on television. His columns appear regularly in a number of publications in the U.S., Australia and the U.K. Contact John at [john@JohnBradley.com](mailto:john@JohnBradley.com)

### Getting a grip on bacteria

BB—Bacteria are living things that are neither plants nor animals; they're very small and among the oldest living creatures on the planet. The Virtual Microbiologist of Bacteria Web site brings together many links on bacteria, bacteriology and related topics. The Web site also provides information about many aspects of bacteria. It's ideal for students and teachers, parents and their kids.

[www.bacteriamuseum.org/](http://www.bacteriamuseum.org/)

### It's hockey, but not as we know it

HH—Online hockey is big in Singapore, and this site is the sport's home on the Web. Fans can get access to all the latest hockey news, including international team and competition news. The sport's elite travel all over Asia-Pacific to hit jacks while on rollerblades. The portal also provides a forum, details of leagues and junior leagues, trades, clinics and action pictures.

[www.hockeyonline.com.sg/](http://www.hockeyonline.com.sg/)

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## Platform News

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## Apple adds eMac, updates TiBook



With its last update, six months ago, the PowerBook G4 received a speed boost, an improved graphics card, and a price cut. The result was a resurgence in

sales that lasted through the Christmas season. It's once again time for Apple to "freshen" its top-of-the-line laptop with what is now known as Titanium PowerBook Rev G.

This revision is more drastic than the last, resulting in improved graphics, a higher resolution screen, faster CPU and a completely revised motherboard. However, it also increases the price by a minimum of US\$200 across the line. The new price points are US\$2,499 for a 667 MHz model (up from US\$2,199 for the 390 MHz) and US\$3,399 for an 800 MHz model (up from US\$2,999 for the old 667 MHz).

These new PowerBooks do sport a



much nicer screen, though. Not only has the resolution increased from 1,152x768 to 1,280x854 (a 25 percent improvement), it is also brighter and higher contrast than the old model. The size remains the same at 15.2 inches.

The video card in both models is an impressive new ATI Radeon 7500 with

32 MB of video memory. That's double the 16 MB of the Rev B model and four times the original Rev A G4 PowerBooks VRAM. The new card is also much faster at 3D rendering than the old Radeon Mobility or CADA animations and games will all benefit from this change. Also in

Continued on page 45

## Handhelds appealing target for virus writers

By Tom Vander

A wireless handheld device becomes more popular, their appeal is a target for virus writers and hackers also increases.

Although there have only been 52 reported cases of viruses written specifically for devices like mobile phones and PDAs, many predict that it is only a matter of time before more wireless viruses make an appearance.

"Industry statistics suggest that by 2005 there could be between one-half billion to two billion handheld users connected to the Internet," says Steven Tjalling, director of research at Symantec Security Response in Santa Clara, Calif. "As there is more adoption and standardization of these devices... you have the threat of viruses like Love Letter and Code Red spreading over the air. So the danger is not just to the wireless device but to the entire wireless infrastructure."

Two recent examples demonstrate the damage a sophisticated virus might be able to do to a wireless network. In Japan, the country's 130 emergency network (equivalent to North America's 911 emergency network) was flooded with calls after a virus that duals the emergency number spread to some 100,000 mobile cell phones.

The phone owners, using their cell phones to check out an online questionnaire on personal relationships, had unknowingly downloaded a Trojan virus. The virus sat quietly, until a prescribed time when it began dialing the emergency network.

"The Web site was taken down pretty quickly but it speaks to what we could

Continued on page 46

## Processor Wars

## Athlon XP goes mobile

By Sean Carroll

It's been another busy month in the processor world, so let's get straight to the news.

## AMD's Athlon XP goes mobile

While the Athlon XP has been available for the desktop since October 2001, the mobile side of the Athlon world has been served by the Athlon 6. Now, the XP architecture has entered the mobile world with the introduction of the mobile Athlon XP processor.

The processor will debut with 1400+ and 1500+ models, and will shortly

include 1600+ and 1700+ versions. The new processors are manufactured with a 13-nanometer process, the first such processors available from AMD. They maintain the Socket A format, but lack the front side bus up to 266 MHz.

The mobile Athlon XP 1400+ will add for US\$1390 and the 1500+ will go for US\$1250—both at 1,000-unit quantities.

## AMD's Hammer slows down in 2003

There's been talk about AMD's Sledgehammer processor for quite some time, but now it has officially been announced. The new 64-bit processor will be known as the Opteron, and will



be available in the first half of 2003. Unlike its proposed 64-bit competitors, the Opteron will handle either 64- or 32-bit applications properly, and runs using the standard x86 instruction set.

This is an important differentiator,

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# Handhelds appealing target

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very well use in the future" billing adds. "There was another threat that came out a year and a half ago in Spain that was a traditional computer worm that spread through email. But as it spread, it randomly generated a telephone number on a specific wireless provider's network. It failed to do any real damage because the numbers were randomly generated. But again, it gave us a glimpse of what could potentially happen."

Wireless email is not the only target. There are reports that SMS messaging is emerging as a new pathway to deliver viruses.

The damage that viruses delivered wirelessly could be costly. Consider the damage that many PC viruses have caused. In 2000, viruses caused an estimated US\$1.5 trillion of damage to systems.

Trilling says wireless devices provide a unique opportunity for virus writers to cause mischief and damage, as few of these devices ship with even basic anti-virus protection; and businesses are notoriously lax when it comes to securing wireless access back to the main network.

A virus could be created that attaches itself to a wireless handheld and begins collecting important information once the user connects back to a corporate network or desktop. That information could be used for a more sophisticated and potentially serious attack.

Virus writers have also discovered that file-sharing programs, like Napster and Gnutella, are another way into corporate networks. These programs leave a system wide open to attack because users can never be sure if the file they're downloading is a virus or disguise.

A virus could be written that attaches itself to a system, attacks it at a later time, or uses it to attack others. And with handheld devices capable of sharing files wirelessly, it's not a stretch to imagine someone sending an infected file to thousands of Internet-enabled cell phones, which are then used to attack a network.

"Someone could put anything into the files that you are looking to share, any number of the nearly 60,000 computer viruses that are out there right now," Trilling adds.

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**Apple targets schools with iMac**  
Continued from page 85

larger screen, and a DVD-CD-RW combo drive—the USB/399 LCD iMac is a CD-RW only.

The iMac will be available through campus computer stores authorized Apple education resellers, and Apple's online store.

**Stylin Photo 2200 seven-color inset**

Epson Inc. ([www.epson.com](http://www.epson.com)) announced the first seven-color inset printer with USB and FireWire interfaces. Now that every shipping Mac includes at least one FireWire port, the number of FireWire peripherals has increased dramatically. At first, the only use for FireWire was digital video, but soon hard disks and CD burners followed. In recent months, FireWire scanners have also debuted, so it was only a matter of time before someone came out with a FireWire photo printer.

The Epson Stylus Photo 2200 is the first seven-color inset photo printer and it features both USB 1.1 and 2.0 and FireWire connectivity. Anyone who knows how long it takes to send a high-resolution 3x10-inch image to a photo printer over a USB or serial cable will appreciate the 40X speed increase FireWire offers.

The Epson Stylus Photo 2200 has a number of other standard features besides FireWire, including the ability to make prints that will last more than 50 years using proper archival paper. It also features a larger maximum print size than many photo printers at 13x14 inches and includes an adapter for roll paper.

While most photo printers have standard cyan, magenta, yellow, and black inks along with a light cyan and light magenta, the Stylus Photo 2200 adds a

new light black ink that helps produce more neutral grays as well as greater tonal range in black and white photo prints.

The ink in the Stylus Photo 2200 is pigment based rather than dye based, which is partially why they can be used for archival purposes. The Stylus Photo 2200 is compatible with both Macs and PCs, and will be available in July for US\$399.

**Mac.com Webmail beta now online.**

Since it launched iTools with Mac OS 9.0, many have wondered when Apple would make a Webmail interface to Mac.com email could be used like Hotmail. This month, Apple unveiled with a beta version of Webmail, which is available at [webmail.mac.com](http://webmail.mac.com).

Mac.com's Webmail works much like Hotmail in that it allows you to both read and compose email from any Web browser without having to configure an email client. Just enter your iTools user name and password and you're logged into an interface that looks a lot like the Mail app built into OS X.



The nice thing about Mac.com email though is that it works as an IMAP account with a compatible email client, and if you are using it as IMAP the Webmail is even more useful. With IMAP the mail is stored on the server and you can create folders which are also

stored on the server. With regular POP mail accounts the mail is downloaded to your Mac and then immediately deleted from the server.

The advantage of using IMAP is that when you log into your Webmail you have access to all the folders you have created as well as all your old email, not just new mail. This is a big plus for when you are travelling without your computer but still need access to your full mail account. The Mac.com Webmail beta also allows you to add addresses to an online address book, which is synced with your account. Unfortunately though, the address book does not sync with your existing email client so you'll have to transfer over the addresses manually.

Overall, for a beta product Mac.com Webmail works amazingly well, especially considering that it is still free to all iTools users. We can't imagine what they might improve in the final version, but they are taking feedback from users so if you have a suggestion you can email Apple using the feedback form on the Webmail start page.

**Software released this month**

- **Mac OS X 10.1.4 update:** Mostly security fixes and support for more CD burners.
- **Microsoft IntelliType 3.1.6:** Finally native support for Microsoft optical mice under OS X.
- **Microsoft IntelliType 3.1.6 Support for Microsoft USB keyboards,** including programmable keyboards, under OS X.
- **Dantz Retrospect 3.0.2005:** Update to the popular backup software to fix a number of bugs in OS X, including memory usage. ☐

Justin Seemore is a Mac OS specialist based in Lancaster, CA. He can be reached at [jseemore@mac.com](mailto:jseemore@mac.com).

## Online sales accelerating, not 'maturing,' BizRate says

LOS ANGELES—Online retail sales during the first three months of the year jumped 41 percent over the same period in 2001, according to a survey of Internet merchants.

The growth is the biggest of four consecutive quarters, including the bi-monthly busy holiday quarter, according to statistics released in April by comparison-shopping site BizRate Inc.

The company says it sees online sales accelerating, not "maturing" or decelerating, and has adjusted its forecast for 2002 to reflect this.

BizRate now predicts this year's total e-tail sales will jump 44 percent over 2001, a change of heart from an earlier forecast of 26 percent.

"There is a strong perception that online industries are faltering, but this is actually the reverse with online retail sales," said Chuck Davis, president and chief executive officer of BizRate, to a prepared statement.

"The trend shows that consumers love buying online and are shifting their purchases from offline to online—and at ever-increasing levels—even though their overall spending might not be growing," Davis added.

The Los Angeles company, which collects data from over 2,000 online retailers, also revealed the first quarter's average online sale was valued at US\$127 per purchase, compared to US\$120 in the year-ago quarter.

—Anasthys

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# Athlon XP goes mobile

Continued from page 68

The 18-micron McKinley chip is designed to give a performance boost of about 70 percent over the fastest Duron processor. It's expected later in 2002.

Looking even farther ahead to 2003, we see the Madison processor, which drops the process to only 13-micron while upping the cache to 6 MB (from 3 MB on the McKinley).

We can also look forward to some improvements in Pentium 4. Intel expects the line will soon be available at the 3 GHz mark to the general public—again, working silicon was shown at WinHEC, but it was attached to a special cooling solution that wouldn't easily fit on a consumer desktop.

The Pentium 4 will also soon incorporate Intel's hyper-threading technology, which allows a single processor to act as if it is two separate processors, by dividing up the transistors and keeping the two groups separate.

The performance gain is expected to be about 26 percent—something that may not be noticed in most applications, but will certainly be appreciated by anyone who performs longer tasks like video rendering.

The thing that most users will notice is the ability to run more than one intensive application at a time. Even with today's high-performance processors, you can't encode video while you're trying to watch a video file—your video playback will be extremely jumpy. Using hyper-threading, the processing power required for the separate tasks can be divided up, allowing for smooth performance all around.

Of course, it remains to be seen just how a hyper-threaded processor will handle multiple instances of simultaneous decoding and encoding.

Once we get our hands on the new hyper-threaded Pentium 4 processors, we'll let you know.

## Pentium 4 gets on a faster bus

As you'd expect, the desktop Pentium 4 keeps getting faster, but that means it does it in two ways. The late Pentium 4 processor we looked at clocked in at 2.4 GHz, and one of the new CPUs clocks in at the same frequency.

This time out, however, the bus speed has ramped up to 533 MHz, from 400 MHz. This switch changes the multiplier value that:

Old: 2.4 GHz = 400 MHz x 6 (300 MHz x 2)  
New: 2.4 GHz = 533 MHz x 4.5 (300 MHz x 1.5)

While the processor is running at the same overall speed, this bump up of the bus speed and the lowering of the multiplier allow the processor to do more work in the same number of cycles, and opens up some headroom for processors running at higher speeds.

Additionally, Intel has introduced a 2.53 GHz version of the Pentium 4, also running on a 533 MHz bus.

We had a chance to try the new processor on a new Intel motherboard, the D850EMV2, which uses the Intel E801 chipset and 512 MB of 533 MHz DDRAM from Samsung. (The new Intel products also build USB 2.0 right into the boards.)

Still, they still limit the hard drive speeds to ATA/66 or ATA/100, so if you want to run an ATA/133 drive, you'll have to use a PCI card.

The system was rounded out by a Leadtek Winfast 257D (GeForce4 Ti) graphics card with 128 MB of onboard memory. We did a hard to head test of the old and new 2.4 GHz Pentium 4,

and that's what we found.

Pentium 4 speed and scores			
Frequency (GHz)	2.4	2.4	2.53
Bus speed (MHz)	400	533	533
Integer scores (MIPS)	348	527	342
Office productivity	168	176	160
3Dmark 2000	214	228	247

As you can see, the move to the faster bus looks the performance up a bit, but, but probably not enough to notice under most applications—the biggest boost was under the office productivity apps (like Excel and Word).

The move up to the 2.53 GHz processor offers a bigger performance boost overall, as you'd expect. Over the 2.4 GHz Pentium 4 processor at 533 MHz, there's not so much of a boost in office productivity, but more so in internet content creation (Dreamweaver being a big component).

We're hoping to get some benchmarking numbers from AMD's recent AthlonXP 2100+ processor shortly. Stay tuned to find out how that CPU stacks up against these! □

# States loosen wiretap restrictions, survey finds

WASHINGTON, D.C.—Proposed changes to state wiretap laws triggered by the terrorist attacks on Sept. 11 would give states added surveillance power that could erode civil liberties, says a review of state-level legislation released in mid-April.

The review, conducted by a Washington-based non-profit that tracks legal and constitutional issues, examined how states approve and implement wiretaps. The Constitution Project (www.constitutionproject.org) seeks to determine whether law compromise individual liberties.

Many states have proposed that law officers have more leeway to tap criminal suspects' telephones or intercept electronic communications, to give enhanced subpoena power, and remove the authority to conduct "roving" statewide wiretaps, the group said.

As of April 8, wiretap law legislation was pending in 22 states and bills had been passed in 3 states, while no legislative action was pending in 25 states and the District of Columbia, according to the review, which is part of the Constitution Project Liberty and Security Initiative. "We must make sure that the benefits of these wiretaps are accompanied by continuing protection of civil liberties," said Peter Swire, a professor at Ohio State University law school and initiative adviser.

More than half of the nation's wiretaps are conducted at the state level, said Swire, who served as chief privacy officer for the Clinton administration.

While the federal government has oversight regarding such matters in congressional committee hearings, states have little or none, initiative director Joseph Orisk, said.

"When you have 50 state governments doing the same thing without some national oversight, that's a surveillance concern," Orisk said.

Attorneys' associations, for example, may do away with the requirement that a wiretap application specify the crime for which the surveillance is sought, Orisk said.

—Alexis Hynes

## Table Tote gets laptops off laps

The Table Tote from PC Tables LLC ([www.pctablets.com](http://www.pctablets.com)) gives notebook PC users a portable workspace that they can carry with them for use in a variety of situations.

When folded, the Table Tote measures 13 1/2" x 11 1/2" x 1 1/2" (L x W x H)—small enough to fit in a briefcase or backpack. In use, it can be used to a height of up to 41 in. (36 in.), and the work surface can be extended to a width of 46 in. (36 in.). It weighs less than 1.4 lb. (3 lb.), and sets up in seconds, according to the company.

The Table Tote is available on the company's Web site for \$649.99. The company says it will also be available soon at office supply stores.

—TJ Staff



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the way things should work

# Nice upgrade, shame about the case

By Justin Simons

We received the upgrade version of OfficeMac vX from Microsoft so we could evaluate the experience of upgrading from Office 2001, as well as the vX suite. The upgrade suite for US\$299 and the full version for US\$499. You're eligible for the special price as long as you have a licensed version of Office 98, 2001, or any individual product from either suite. If you qualify for the upgrade, OfficeMac vX is an amazing deal. However, if you're looking at paying what amounts to \$730 Canadian for the full version, you may want to think more carefully.

## OfficeMac vX

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www.microsoft.com/office/mac/homepage  
Requires: Mac OS 9  
Price: US\$299, US\$299 (upgrade)  
Plus: Apple, not user interface. Intrusive in an excellent email program.  
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with less than 256 MB of RAM  
Our first week 4 out of 5

## Packaging

With most products packaging is not worth mentioning. It protects discs in transit and eventually winds up in the landfill. However, we mention it here because OfficeMac 2001 was brilliant in this respect and vX is a major step back. OfficeMac 2001 came in a small round plastic case about the size of standard audio CD cases. It had sleeves for the OfficeMac 2001 CD and nine other discs of your choice. Many computer people used this case to carry their system CDs and other emergency tools. One Microsoft employee said she used it to carry audio CDs in her car. Either way, it was a brilliant design that took up much less space and didn't wind up in the trash like most software boxes.

Fast forward to OfficeMac vX, and it's a different story. Not only is the package a regular-size box containing a single CD, it's a total pain to open. The heavy

3D shapes protruding from the package hold the software in like a blister pack, but we actually had to break out the Emtec knife to get the disc out. No doubt to say, the packaging was mangled and not reusable.

Again, if this was any other software it wouldn't be worth mentioning, but Microsoft had such a great, useful, environmentally friendly design with the 2001 box that we don't help but wonder what happened. Enough about that though, let's move on to the substance.

## Installation

Thankfully, installing OfficeMac vX was as easy as 2001 or any other Mac software from Microsoft. Simply insert the disc into your Mac's drive. The OfficeMac vX folder to your Applications folder and you're done. If you want, you can add items from the Value Pack folder, the most popular of which are the expert library, additional fonts, Windows Media Player, and RealPlayer. It's not too hard to see a stable version of Windows

Media Player for the Mac, although it's also available without buying Office. One person said that the standard install includes MSN Messenger—whether you want it or not. However, since it's just sitting in the Office folder, you can simply delete it if you don't want it.

Once the files are on your hard drive, you complete the installation by simply launching any of the suite's main apps (Word, Excel, PowerPoint, or Internet). This opens a welcome wizard and when you enter your name and the software's serial number. At this point, the upgrade version searches your hard drive for a valid previous Office install, so make sure you don't delete your old version until vX is up and running. The full version does not perform this check and that is—was for as we could tell—the only difference between the two.

If you're upgrading from OfficeMac

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# Microsoft's future is wireless and converged

By Sean Carroll

SEATTLE, Wash.—You've probably heard the word "convergence" so many times that you've given up hope that it'll ever come to fruition.

The seeming futility of linking convergence, however, didn't stop Microsoft chairman Bill Gates from belching onto the concept yet again during his keynote address at the 2002 Windows Hardware Engineering Conference (WinHEC), held in Seattle.

"The PC will be used for a variety of things it's never been used for in the past," said Gates during his talk. "When you think of communications in the future, you will be in control."

During the informal talk, Gates swapped the stage with other Microsoft executives giving demonstrations to the crowd.

Senior director of business manage-

ment, Steven Guggenheimer, told the crowd about two key new Microsoft technologies, codenamed Freestyle and Mira, both of which were introduced at January's Consumer Electronics Show.

Freestyle and Mira are designed to work together to help integrate your PC with the rest of your life.

Using Freestyle, you can make your PC accessible to other devices around the house, such as your television. "We want to connect multiple PCs together," claimed Gates. "It will make the power of the PC available whenever you go."

Imagine a large-screen high-definition TV sitting in your living room, but connected wirelessly to your local network. Now, while you're watching a television program, your MSN Messenger agent can alert you on the HDTV screen as new messages are coming in.

You can also use that same television screen to access multimedia data located

back on the PC, such as digital photos, MP3 files, or digital video.

With Mira comes the ability to wander around your house without losing touch with your PC. The Mira experience involves a wireless monitor hooked up to your main PC using the Remote Desktop Protocol found in Windows XP Professional.

The theory is that all of your data can be accessed from whichever screen you're at in your house, using one handy remote control.

There's also a social aspect to hooking your TV up to the Internet. The conver-

sive to the outside world would allow you to watch a basketball game with your friends virtually while the game is playing on the screen, your online friends will appear in the corner of the screen (or, at the very least as icons representing them) and everyone will be able to provide commentary as the game unfolds, all without anyone having to leave home (or even go after each other).

With Mira comes the ability to wander around your house without losing touch with your PC. The Mira experience involves a wireless monitor hooked up to your main PC using the Remote Desktop Protocol found in Windows XP Professional.

When the monitor is at the PC base station, it receives the video signal via VGA cable and power directly from the wall. Remove the monitor component from the base station, and the video sig-

Continued on page 76



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
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# Microsoft's future is wireless

Continued from page 73

nal gear wireless and the screen's internal battery kicks in. You then interact with the touch-sensitive screen as you would with a tablet PC or Pocket PC screen.

The big difference is that the majority of the computing power would be located back at the host PC, with only minimal processing going on at the mobile monitor end.

While both of these technologies are less PC-centric than the current model,

there's still a big use for the PC in your home.

Most notably, it will serve as the gateway for the rest of the devices in the home, but it will also be the hub for content creation and editing—it's pretty hard to imagine trying to edit your digital videos on the television screen using a remote control, after all.

Because of bandwidth limitations of wireless networks, Miro devices won't be able to handle 3D gaming or full-motion DVD video in the first version, which puts these graphics-intensive applica-

tions right back at the desktop PC application. (This doesn't even take network latency into account, especially when it comes to wireless.)

Gates mentions that latency will be the biggest issue going forward in terms of making all the components of your network come together seamlessly, and Microsoft will be looking into special caching and compression techniques to enhance "local intelligence" and improve perceived network speeds.

The desktop PC will also serve as the major centre for work in the household, and to that end, Microsoft is becoming more enthusiastic about multiple monitors, despite having included capability for multi-displays on a single desktop since Windows 98.

"Another thing you'd see from us, as a larger screen size," claimed Gates, relating to ways to get around the physical limitations on the size of individual TFT flat panels by using multi-head displays. Both Guggenheim and David Williams, director of Windows hardware platform division, showed off applications using a multi-monitor setup.

Most interesting of these was a con-

spicuous curved surface accommodating three "screens" that were stitched together into one display. Unfortunately, this screen is still a prototype, and because the screen was rear-projected, it was also about the size of a desk. Still, it's worth watching.

Windows is a big part of the whole picture for Microsoft. The network both Freestyle and Miro will run under will be wireless and, theoretically, will be protocol-agnostic—if you have an 802.11b network in your house, you can use that, but it could just as easily be 802.11a or an emerging protocol.

Microsoft has also introduced a Bluetooth keyboard and mouse, putting some pretty powerful backing behind a wireless protocol that has until now seemed somewhat adrift in the consumer space.

Bluetooth support will become native under Windows XP in the second half of 2003. "We want to see wireless networking very, very pervasive," said Gates.

With both Freestyle and Miro products scheduled to hit the market for Christmas 2002, it looks like that may happen fairly shortly. □

## Hebergement Web

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# A wild wireless ride

## In conversation with David Neale of Rogers AT&T Wireless

By Jeff Evans

**W**ant to know what's coming to Canada the rest of this year, in a way of new digital phones, wireless services, and handheld computers? David Neale, vice-president of new product development at Rogers AT&T Wireless, is one of the guys you want to talk to.

Neale is the purveyor of new technologies for Rogers AT&T Wireless's 3.4 million Canadian wireless phone subscribers. He has lived in the cradle of the digital wireless hurricane since it began and has an almost giddy enthusiasm for the invisible fleet of shiny new toys he's about to serve up to millions of Rogers' customers. In conversation with *The Computer Paper*, Neale highlights his company's current products.

### On Portage

In May, a new version of the Rogers

Portage software, called Portage Plus, was introduced. The Portage product manages the connectivity between digital cell phones and handheld or laptop computers; the Plus version works on the company's GSM/GPRS network.

Neale says Portage Plus will make the process of using a cell phone as a wireless modem much easier for the average user. "Most of the new phones going out the door in 2002 have that capability [for digital messaging and data, and to link with a computing device]," he says, "but it's really only the geeks and techies who are currently using cell phones as wireless modems."

Portage Plus will change that, he says. Available for Palm, PocketPC, and Windows platforms, it will simplify the process of connecting a computing device to a cell phone for email, messaging, and Internet surfing. It will allow users to connect to the Rogers network—which now covers an area in

which 99 percent of Canadian live. However, users will need to upgrade to a GSM phone to take advantage of this.

Rogers will charge wireless Internet subscribers by amount of downloaded data, rather than the always-on basis of a home phone line. For heavy wireless data users, however, there will be a "big bucket" monthly rate for unlimited wireless downloading, says Neale. For short downloading service users, there will be a per message fee of about \$0.30.

### On Treo

Neale is very keen on the new Handspring Treo, which integrates a GSM/GPRS phone with a Handspring handheld computer running the Palm OS. "It would have been difficult to take Palm OS onto a cell phone, instead it makes more sense to put a phone into Handspring."

Neale predicts a huge amount of Canadian interest in the Treo. "The Palm

OS needs an introduction, and the Treo has a nice form, weight, and comfort. See people getting used to handhelds in access to the PC at the office, synchronizing with the PC to get info such as contact lists."

Palm Canada recently decided not to bring the latest wireless-enabled model of the Palm into Canada. Neale suspects that Palm Canada is "waiting [for] a provider" for a device with an integrated voice phone and other more appealing features, due sometime later this year.

Neale is convinced that the early adopter crowd in Canada—young people and mobile business people—is primed to pile into instant messaging and wireless Internet as a big way.

He believes that the ability to connect to the network via wireless phone or modem, easily, affordably, and securely, will attract a new audience of general computer users, "not just the tech junkies."

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## Online advertising expected to bounce back—study

**NEW YORK**—The U.S. online advertising market is “due for an explosion” this year after a brutal 2002, according to a study by Emarketer ([www.emarketer.com](http://www.emarketer.com)) and Forrester.com.

Last year was one of the worst on record for all advertising formats, and the Internet was not spared. Emarketer, a company that aggregates and analyzes e-business information, said the total value of online advertising fell 13 percent from 2000 to 2001.

The good news is, the study predicts an 11 percent increase this year, as online ad spending is expected to jump from US\$7.3 billion in 2002 to US\$8.1 billion in 2003.

Emarketer said the online ad sector will continue to experience steady growth through at least 2005, when it projects US\$15.5 billion in spending. The firm expects US\$9.3 billion in Web ad spending in 2003, followed by US\$11.4 billion in 2004.

Online advertising spending accounted for 3.2 percent of total U.S. media spending in 2000, the study said. That figure slipped to just 2.9 percent last year, and is

expected to return to 3.1 percent in 2002.

The online sector will grow to 3.5 percent of total U.S. media spending in 2003, and 3.8 percent in 2004, the study predicted.

The Internet is not growing as explosively in the U.S. and Canada as it did a few years ago, but Emarketer still expects the compound annual growth rate of the number of Web surfers in those two countries to be 14.3 percent from 2000 to 2004.

According to Emarketer, online advertising is “destined” to grow over the next several years, thanks to a variety of factors. Among the factors cited were a growing number of Web surfers, more upper income professionals joining the online ranks and greater usage of broadband

Internet access.

The Internet is not growing as explosively in the U.S. and Canada as it did a few years ago, but Emarketer still expects the compound annual growth rate of the number of Web surfers in those two countries to be 14.3 percent from 2000 to 2004. In raw numbers, the U.S. and Canadian Web population will grow from 108.1 million in 2000 to 284.6 million in 2004.

During the study period, the number of Internet users is expected to rise 17.1 percent in the Asia-Pacific region, 21.7 percent in Europe, 27.7 percent in Africa, and 39.8 percent in Latin America.

The worldwide Internet audience is expected to double over the same four-year period—from 352.5 million in 2000 to 709.1 million in 2004. Emarketer said the Web will draw more advertising spending as it increases its reach.

The increasing popularity of broadband also is expected to drive more advertising spending to the Web. Emarketer cited a Nielsen/NetRatings study that found people spend more time online and view more

pages when those pages load quickly. Once an Internet user gains broadband access, his or her pages viewed rises 59 percent, and time spent online goes up 23 percent, Nielsen/NetRatings said.

Emarketer estimates the number of broadband households in the U.S. grew from 6.2 million in 2000 to 11.4 million in 2001. It projects 17.6 million households will have high-speed Internet access by the end of 2002, 25.6 million in 2003, and 34.7 million in 2004.

Of course, broadband will account for an increasing percentage of total Internet access—as from 12.7 percent in 2000 to 44.6 percent in 2004—the study said.

Broadband does not merely make faster page loads, it also allows greater interactivity and provides new possibilities for rich media, said Emarketer.

Broadband users also are more likely to have made a purchase online than dial-up users. The study said an increased audience will spend more money online, which in turn will attract advertisers.

According to the study, the percentage of U.S. Internet users who shop online will

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## Nearly half of Canada's Net households go Broadband

increase from 53.2 percent in 2001 to 59.9 percent in 2004. Not only will 50 million people be shopping on the Web in 2004, millions more will research product information online to make their office purchases, it said.

Emarketer said the Internet allows advertisers to not only find a "highly targeted" audience, but to interact with people on an unprecedented level.

"Online advertising provides unique opportunities to engage in a two-way dialogue with your customers and prospects, adding new dimensions to your brand image," the study said.

For best results, Emarketer recommended a coordinated advertising strategy that uses television and radio's 99 percent penetration rates in the U.S. to create what it termed "broadscale awareness."

The Internet's 94 percent penetration rate is relatively low compared to the two dominant media, it said. But it makes up for a lower reach with efficiency in targeting, which allows advertisers to reach a desirable audience at a lower cost.

The study relied partly on research information from the Internet Advertising Bureau (www.iab.net).

—Arenbyts

TORONTO, Dec.—The penetration of high-speed Internet access technologies in Canadian households has doubled since 2000, according to a new report that says some 48 percent of all online Canadian adults who connect from home now use digital subscriber line (DSL) services or cable modems.

The report from the pollsters at Ipsos-Reid also says that DSL technology, which phone companies such as Bell Canada launched two or three years behind broadband offerings from many cable TV companies, now links 42 percent of all high-speed Internet users, compared to just 29 percent in March of 2000.

The latest edition of the firm's quarterly Canadian Interactive Read report notes that U.S. broadband access is pegged at just about 21 percent of all at-home users.

"The acceptance of broadband in Canada and the U.S. couldn't be more different," Chris Feinberg, vice-president of technology research at Ipsos-Reid, said in a prepared statement.

"The difference is due to a myriad of factors, including lower access prices in Canada, a less fragmented industry relative to the U.S., our regulatory framework, better and more reliable access, and extremely positive responses from consumers to marketing campaigns."

Cataloguing Internet access at any speed, Ipsos-Reid said 63

percent of Canadians have some form of Internet access at home, compared to 55 percent in the U.S.

However, the researchers said, 55 percent of the adult population in the U.S. represents 114 million people, while 62 percent of the Canadian adult population is just 15.3 million.

"Ultimately that is why Americans are generally going to have a lot more choice, selection, and opportunity to purchase goods and services online," Feinberg said.

Ipsos-Reid said 75 percent of all Canadian adults have Internet connections when spaces such as workplaces and public access services are included, compared to about 69 percent by the same measure in the U.S.

The report also echoed other studies that have suggested broadband users spend more time online.

Feinberg said Canadian broadband users are online for an average of 14.3 hours a week, compared to 5.6 hours a week for dial-up users.

He said the high-speed users were "more inclined to be trying different online activities such as online banking and online shopping."

"Accordingly, increased penetration of broadband is going to keep Canada ahead of the curve when it comes to most things Internet," Feinberg said.

—Arenbyts

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#### NEW & NOTABLE

## Insurers cover identity theft

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cleanup rather than cash  
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FARMAX, Va.—Consumer concern over online fraud is helping a Fairfax, Va., company turn its identity-theft protection service into a product that's catching the attention of mainstream insurance companies.

One such company, U.S.-based Farmers Home Group ([www.farmershome.com](http://www.farmershome.com)), has announced that it is reselling the Identity Theft Protection Plan launched more than a year ago by privately held PromiseMark Inc. ([www.promisemark.com](http://www.promisemark.com)).

A credit-monitoring service scans customers' electronic credit files and alerts them to the kinds of activity—changes in balances and account inquiries—that could indicate someone else is using their credit.

The Fairfax outfit began by offering data-recovery and virus-protection plans in which the focus is on prevention and cleanup rather than cash claims. And, while the PromiseMark's Identity Theft Protection Plan promises up to \$500,000 to cover losses that can't be recovered by other means, PromiseMark says "cleanup" is also the biggest problem in identity theft.

"Most credit card companies are very good about working with their cardholders," said PromiseMark vice-president of marketing, Mark C. Bowls. "If you report the loss of a credit card as soon as possible, your liability is usually limited."

"But the real [damage] through identity theft is not the financial loss, but the hundreds and hundreds of hours that you have to work to make sure your credit is repaired."

Bowls said consumers are "on their

own" when it comes to ensuring that the correct information finds its way to the various credit-reporting agencies and the multitude of other financial institutions where records might be easy after a case of identity theft.

ProtonMark's identity theft protection plan includes "fraud resolution services" to help repair the identity-theft paper trail and help recover losses.

A credit-monitoring service scans customers' electronic credit files and alerts them to the kinds of activity—changes in balances and account inquiries—that could indicate someone else is using their credit.

Doms told TFP that both the identity

theft and hacker protection plans are available in Canada—the underwriter is Am/Amiga Surety.

"We currently offer a similar plan via Radio Shack Canada, which is available in the English-speaking provinces," said Doms.

"We are currently working with MasterCard Canada to develop a credit card program, which will include French Canadian technical support capability—a current weakness—but that is a couple of months off."

Other providers of ProtonMark's identity-theft protection plan include credit card companies themselves.

—Nancylyn

# Pacific Rim environmental action

RE—Pacific Environment seeks to protect the living environment of the Pacific Rim by promoting activism, empowering consumers, and influencing international politics. Among its activities are action on climate change, the depletion of the world's fisheries, and sustainable logging. Focus nations are China, Japan, and Russia. The site provides links to articles from the organization's newsletter, reports on environmental policy and issues, and more.

[www.pacificenvironment.org](http://www.pacificenvironment.org)

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# That in online content low

Continued from page 81

seen from our research that trust is e-commerce sites, and sites that provide advice for consumers about what to buy is alarmingly low," Brondier.

Only 31 percent of those who have been online for three or more years said they trust e-commerce sites and only 33 percent of surfers who visit such sites said they trust them.

Sixty percent of those surveyed did not know that some of the most commonly used search engines are paid to list certain Web sites more favourably than others.

The 3,500 respondents, interviewed by phone from Dec. 28 to Jan. 7, have high standards; the survey found 84 percent said it's "very important" that they are able to trust information on a site,

and the same proportion believe the site must be easy to use.

"It's as important for people now to be able to trust what they read on a Web site as it is for them to be able to use it," Brondier said. "We think that's a pretty striking finding."

Researchers said they were surprised to find that 80 percent of those surveyed did not know that some of the most commonly used search engines are paid to list certain Web sites more favourably than others.

News and information sites must clearly disclose their privacy policies and separate editorial content from advertising, participants told researchers. They also said they believe news and information sites are as credible as their offline parents.

Hoping to improve Web credibility, Consumer Web Watch set five guidelines based on the findings of the initial research that Brondier said shows that consumers believe the name of the game is disclosure.

Consumer Web Watch is supported by the PricewaterhouseCoopers, the John S. and James L. Knight Foundation, and the Open Society Institute.

—Brendan

## Web credibility guidelines

1. Web sites should clearly disclose their ownership, mission and display the physical address, phone number, or email address.
2. Sites should distinguish between ads and news and information, clearly identify paid and non-paid search results and disclose all business relationships.
3. Fully disclose costs, including fees for service, shipping, handling and transactions.
4. Be prepared to correct mistakes, and prominently display a page where consumers can make
5. Make privacy policies easy to find and understand, disclose how visitors' personal data are used, and include information on whether the site uses cookies to offer user tracking technologies.

Source: Consumer Web Watch

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Basic Mouse with lifting to assist in reaching		Scroll two directions faster with two wheels	
MS-101	MS-101-L	MS-101-L	MS-101-L
<p>Item # MS-101 (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>
<p>Scroll two directions faster than two wheels</p>			
<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>
<p>Wireless Mouse - Five available</p>			
<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>
<p>The latest advanced optical technology</p>			
<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>
<p>Second Mouse System</p>			
<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>	<p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p> <p>Item # MS-101-L (MS-101-L)</p>
<p>Wireless Keyboard &amp; Mouse</p>			
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# IF CSS animations & Transitions

Continued from page 68

opacity, height, width 300px; height:300px, filter:progid:DXImageTransform.Microsoft.BlindFade&direction=right">

We still need some JavaScript code in order to make the transition from the first object to the second one function. The JavaScript code requires the Apply and/or Play methods in order to do this. That code looks like this:

```
<head>
<script>
we transitionDate=0,
function transition() {
    transitionDate+=1;
    if (transitionDate==7) {
        transitionDate=1
        strStyle.opacity="visible",
        gubStyle.opacity="hidden"
    } else {
        transitionDate=6
        strStyle.opacity="hidden",
        gubStyle.opacity="visible"
    }
    transitionDate+=1;
    document.getElementById("Paw").
    </script>
</head>
```

What we have here is a function called transition(), which, when activated, applies the transition filter (Microsoft transitions are a type of filter) to the overlaying Web object called transitionDate, making the previously invisible Web object "other" visible while making the original one ("gub") invisible in the process. The script is designed so that if triggered again, it reverses the process.

Now all we need is something to trigger the transition. A simple button with a JavaScript trigger that activates the transition() function is what's needed.

```
<button onclick="transition()">Activate
Transition</button>
```

Once you've made sure that the JavaScript is contained in the header of the page and the rest of the code samples are in the body of the Web page, try running it and see what happens. In this case you'll see the Blind transition take effect, which looks rather like somebody has opened a set of Venetian blinds to reveal the underlying object.

The code outlined here serves as a good base, and all you need to do in most instances is simply switch out the active filter component in the transitionDate object to apply different filters. To do that effectively, you need to know what values are available for each transition effect.

## Blinds and Bars

If you tried out the code above, you'll already have a sense of how the blinds transition works. It has four attributes: blinds, direction, duration and enabled. The blinds attribute sets the number of "blinds" that appear, and it takes a numeric value. The direction attribute takes one of four self-describing values: up, down, right, or left. The duration attribute sets the time value for the transition, specified in seconds and milliseconds (0-99999). Finally, the enabled attribute is a standard attribute common to most filters and transitions, and by default is "on,"

even when it is not specified. Experiment with some of these other values in the previous code sample to see what other effects you can get.

The Bars transition creates an effect like a door opening or closing. It also has four attributes: duration, enabled, motion, and orientation. The first two work exactly like they do for the Blinds transition. The motion attribute has two values: out (the transition moves from the center on out) and in (the transition moves in from the border). The orientation attribute has two self-descriptive values: horizontal and vertical. As a sample of how this can be put together, replace the filter statement in the transition object with the following line of code to see the Bars transition in action:

```
filter:progid:DXImageTransform.Microsoft.Bars&
motion=vertical, enabled=1
```

## Checkerboard and Fade Transitions

The checkerboard filter creates a transition that looks like a regular pattern of checkerboard squares are uncovered to reveal the object underneath. It takes three attributes: duration, squaresX, and squaresY. The duration attribute works the same way as it does with the Blinds transition.

The squaresX and squaresY attributes each take numeric values that must be greater than two, which set the size of the checkerboard squares. If you have matching values (i.e. squaresX=squaresY=4) you will get squares. If the two values are different, you'll end up with rectangles instead. To see this in action, replace the

filter statement in the transition object with the following line of code:

```
filter:progid:DXImageTransform.Microsoft.Bars&
squaresX=4,squaresY=4,direction=right
```

The fade filter creates a transition that reveals new content by "fading out" the original content. It takes three attributes: duration, enabled, and overlap. The only new attribute here is overlap, which can take on a value from 0.0 to 1.0 and sets the portion of the original's duration in which both the original and the new content are displayed.

Here's how it works: if you set duration to 30 seconds and overlap to 0.4, for the first three seconds the original content begins to fade out, then over the next four seconds the transition displays a sweeping effect where both the original content and new content appear at once—that is the overlap segment. The final three seconds see the new content fully fade in. Here's how such code would look:

```
filter:progid:DXImageTransform.Microsoft.Fade&
duration=30,overlap=0.4
```

## Next time: More Microsoft Transitions

The author would like to thank Robert Kubeleski at Calgary Can (jw@calgarycan.com) for the use of the images and to illustrate the transition effects in this article.

Keith Schlegel-Roberts welcomes any comments, suggestions, or FTM tips you may have. You can email Keith at: kschlegel@compuserve.com. His book on CSS, published by Prentice Hall, Can CSS (ISBN 0-13-083444-4), is available in bookstores.

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# Seeking a single messenger

## Wanted: An instant messenger that plays well with others

By Sharlene Myers

When I get a message from a friend secretly asking me to add her to my contact messaging contact list, I was happy to oblige. After all, the lives far away from me and I don't see her often. But it meant downloading and setting up a third messaging program on my computer—which may now be running ICQ, Yahoo Messenger, and MSN Messenger at any given time—once some of these programs will allow me to chat with friends using other services. Of course, this is in addition to any files or programs I may have open for other tasks I'm performing with the machine.

So I started looking for one program that would talk to all the others. And I was pleasantly surprised—there are several available that promise interoperability with other, more mainstream messaging programs, such as AOL Instant Messenger (AIM), ICQ, Yahoo Messenger, and MSN Messenger, and a few claim to be compatible with IRC as well. The following is an overview of some of the popular third-party messaging programs with business interoperability. Being was not long-term or comprehensive, although I did attempt to verify connections with ICQ, Yahoo, and MSN.

One caveat: none of the mainstream

messaging providers are less than thrilled about third-party software accessing their services, and on several occasions, have tried to block users of third-party software from communicating through their servers.

Although the developers of the software may advertise interoperability with certain services, the reality of that interoperability may change from one day to another because the originating service has cut off access.

If your communication with any of your contacts is mission critical, it would be wise to keep a copy of the originating service's software installed. Most of the third-party software developers post notices of changes to their Web sites.

### Easy Message

From Ryan Denorex Inc.  
www.easymessage.net  
Free trial



Easy Message is a simple program that won't take up much space—it only takes a few MB and the interface is simple. It comes with four skins, which can be further customized by adjusting hue, saturation, and luminance on the sliding scales provided. For those who

like everything to match, one of the skins is a standard Windows look that will match your desktop settings.

It's designed to be interoperable with MSN, AIM, Yahoo, ICQ, and a POP3 email account for mail notifications. I managed to set up connections with MSN and Yahoo with little trouble, but could not establish a connection to ICQ. It also couldn't seem to mail out to Hotmail and Yahoo accounts, and screens them with a check.

Keeping the program small and simple means some of the fancier stuff in other messengers has been left out of this one, like graphical emoticons. If you know your keyboard shortcuts, though, the emoticons will be visible to message recipients using programs that support them, like MSN.

One complaint with this program is that when the status of the recipient was changed to "away" in MSN, it didn't change in Easy Message, so I didn't understand why my friend wasn't answering questions (rather unlike her). The site has a bulletin board monitored by Ryan Denorex, the developer, who will post answers to questions or problems.

### Instant Messenger 3.0

From Babylon, LLC  
www.im3.com/nyrj  
Free trial (limited access) \$50/yr (full version)



Designed to be interoperable with AIM, Yahoo, MSN, and ICQ. Downloading this program required quite a bit of personal information, including full name and address, and then it offered specials from marketing partners and newsletters from Babylon, before finally getting to the download. The free demo version of the individual messaging client offers basic functionality, with more advanced features offered with the membership fee, including the option to encrypt messages. Current headlines run through a ticker at the bottom of the main window.

The chat window works much like Yahoo and MSN, with an active typing window on the bottom and sends automatically on returns. Users have the option to save a conversation by clicking off a box in the chatting window. Although it connects to ICQ, the program does not seem to have a way of importing an entire ICQ contact list from the user's hard drive, so ICQ friends will have to be added manually.

### Jobber Instant Messenger 1.0.0.6

From Jobber, Inc.  
www.jobber.com

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Free, Free



Jabber Instant Messenger is an XML-based open-source messaging program, a commercial offering based on the work of the jabber.org open source movement. The IBM software downloaded and installed easily, and we connected to MSN Messenger with no trouble, but had problems connecting to Yahoo and ICQ. A visit to the support page on the Web site revealed the source of the problems—Yahoo had recently changed its messenger protocol, and according to Jabber support, “Yahoo! has stated that they have no intention of providing Jabber with the information required to continue interoperability.”

A similar situation exists with AOL, which has “blocked” interoperability between our Jabber server (running at jabber.com) and their AIM service.” The trouble with ICQ was attributed to a problem between the jabber.com server and ICQ servers, which was making it difficult for users to reliably access the ICQ gateway. Indeed, at the time of writing (late April), AIM was interoperable only with MSN, making it unsuitable for those looking to use it primarily for interoperability.

#### Odigo 3.1

From: Odigo Corp.  
www.odigo.org  
Free, free



Odigo has piles of features, allowing users to do very specific searches for chatter with similar interests, and to “co-surf” with friends, so you’re all looking at the same Web pages at the same time (friends need to be using Odigo to access this feature). It is designed to be interoperable with AIM, ICQ, MSN, and Yahoo—contact lists from other services can be imported, and the organizing scheme is indicated as brackets behind contact names.

The main window contains an ad banner on the bottom, which changes constantly and can be a little distracting at times. Within minutes of installing the

program I got three spam messages, but when I changed the Radar status to “Visible only on current page” the messages stopped, and this doesn’t change the status online friends see. Odigo also keeps message histories, like ICQ, so users can go back and check previous conversations.

#### Trillian 0.725

From: Corbin Studios  
www.trillian2.com  
Free, Free (donation requested)



Trillian downloads easily and offers interoperable messaging with ICQ, AIM, MSN, Yahoo, and IRC. It imported the ICQ contacts stored on any computer easily, as well as the server-based contacts for MSN and Yahoo. Users who rely on messengers to get notifications of mail in their Hotmail or Yahoo accounts will appreciate the fact that this is available in Trillian as well. The interface is easy to use and ad-free.

Whatever services are available in the organizing programs tend to be available from Trillian as well, such as MSN’s handy user-to-user notification. The software offers a pop-up menu of contacts, but some of the more exotic ones will not necessarily translate to recognize using other programs.

Trillian is also downloadable—look on the Web site takes users to pages of downloadable skins, with \$5 available at press time. If you don’t like the ones available, there are instructions for creating your own.

#### What about Mac?

Mac users want to get short shrift when it comes to instant messaging—the Mac versions of the mainstream programs offer only a shadow of the features Windows-based ones take for granted. Unfortunately, when it comes to third-party message programs, the situation is no better. I could not find a reliable interoperable messenger for Mac OS 9.1. There is one available for OS X, called Fire (www.firechat.net), which I was unable to test because I did not have access to a machine running OS X. ☐

Special thanks to Mona Fard aka, although not a ICQ employee, allowed me to repeatedly interrupt his day with instant messages from various programs and requests for feedback.

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# Boldly going where no comics have gone before

TAMPA, Fla.—Comic book sales have been plummeting for years, and pornography seems to be the only content people are willing to pay to view on the Internet. But Mark Alessi bets that Comics on the Web ([www.comicsonweb.com](http://www.comicsonweb.com)) is a good idea.

According to Alessi, the publisher and chief executive officer of CrossGeneration Comics (CrossGen), the Internet is the perfect format for presenting comics. And at US\$1 a month, he believes people will sign up.

Alessi is familiar with losing long odds, having started his publishing company just over two years ago in the middle of a downward spiral for the industry.

"Comics were decreasing as a business. There was a shrinking audience, the cost of comic books was rising and the book stores that sold them were closing," he said. "But we built CrossGen into the fourth largest publisher in two

and a half years."

The secret to CrossGen's success, Alessi said, was to go away from the staple of comic books for years—the super hero. He said super heroes are "unconventional" and only appeal to a limited audience. He wanted a product that would appeal to the mainstream, so he built 13 titles across eight genres.

The genres include science fiction, fantasy, mystery, Southern epic and historical fantasy.

By bringing CrossGen's stable of stories to the Internet, Alessi said he is applying the same principle—appeal to the broadest possible audience.

"We launched five weeks ago with a standard, low-bandwidth option so anyone can read our comics," he said. "In two weeks, we will add a high-bandwidth option for people with fast connections."

Tony Panosco, CrossGen's vice president of product development, said

Comics on the Web ([www.comicsonweb.com](http://www.comicsonweb.com)) launched as 1,500 pages of content from about 70 issues. He said the technology behind it is all Flash, to reach as many people as possible.

"We are partnering with portals, because those are the places where people already are going," said Panosco. "We are not trying to drive people to our site."

CrossGen signed early deals with Ytango.com, a portal for young women and teens, plus various niche comic book portals that Panosco said the company's agreement with Lycos gave it credibility.

Lycos made Comics on the Web one of the featured products in its Angelfire and Tripod portals.

Jerrie Rieble, senior product manager for Web publishing at Lycos, said he knew about CrossGen because he worked in the comics industry for many

years. He said when CrossGen called Lycos to propose a partnership, he gave Comics on the Web a strong recommendation.

"I thought it would be perfect for Angelfire," said Rieble. "Comics on the Web doesn't just put the pictures up there, they are interactive. People can click on a link and get more information about the story, the word balloons grow larger when you roll your pointer over them, and many other things."

"It is a sticky product, because people are going to want to come back to follow the story every time a new issue is released," he added.

To promote Comics on the Web, Lycos sent e-mails to Angelfire and Tripod users who signed up for a newsletter of updates on available products. Rieble said.

"We gave a description of Comics on the Web, and we spoke very complimentary of it because it's a great product," he

IN

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said. "The presentation of comics, with Flash technology, is far and away the best I've seen on the Internet. We are impressed with the quality, the technology and the ease of use."

Charles Kilby, director of publishing for Angelfire and Tripod, said the Comics on the Web business model fits well with Lycos' strategy of building subscription models.

"Many companies have shied away from the advertising model due to a lack of revenue," said Kilby. "At \$1 a month, it is less than the cost of one comic book on the newsstand."

"And you don't have to find a place to store your comic books," added Ruble.

According to Kilby, Lycos is trying to follow the model of cable television—which offers local channels for free, basic cable stations for a small fee, and premium movies channels for a higher price. He said Lycos offers some things for free, while some of its users pay for more storage space for their home pages. Subscription content is another component of the plan, he said.

Paradeo said Comics on the Web has

"several thousand" subscribers. Lycos will not reveal the number of its users who have signed up, but Kilby said the company is "very happy" with the results after just three weeks.

"We know users will pay for it, because they have been asking for it," he said.

"I can see this concept catching on for all comic book publishers," said Ruble.

CrossGen's Alexis said 15 to 20 comics are available as free samples for the curious to try.

He said those samples will assist people can get comfortable with the idea of viewing comics online.

"The comic book industry has probably lost two to three generations of readers because they couldn't find bookstores to sell them to," he said. "We are adding one or two new portals per week. We have 13 titles available, and next year we'll have 16 titles available."

Other future developments include comics that "read themselves" to assist viewers with no word balloons, Alexis said. Eventually, the comics will be in several languages.

—Newsbytes

## 'Cyberchondriacs' abound on the Web—Harris poll

ROCHESTER, N.Y.—Some 110 million people in the U.S.—four out of five Internet users—take their health care questions to the Web, most of them using search engines or portals. Harris Interactive recently

"Cyberchondriacs," as Harris calls them, average three health-information searches per month, according to a telephone survey of 707 adults conducted over seven days last month.

These users of information about everything from cancer to pinkeys represent 80 percent of the nation's Internet population and 53 percent of everyone 18 and older in the U.S., the poll found.

Fifteen percent say they engage in the practice "often," while 35 percent do it "sometimes" and 27 percent answered "hardly ever." The count is more than 13 percent greater than last year's 90 million, Harris said.

"These data show that the Internet continues to be used by huge, and growing, numbers of the public interested in getting information about particular diseases or treatments or about staying healthy," Harris said in a news release.

"The results also demonstrate the critical importance for health care Web sites to be quickly and easily accessible through search engines and portals."

Nearly half—53 percent—prefer searching multiple Web sites and use a portal or search engine, 26 percent go directly to a health-care site and 21 percent peruse a general site's index.

Other Harris Interactive research has found an increasing number of cyberchondriacs going to sites of academic, governmental and pharmaceutical entities instead of "pure e-health" sites.

—Newsbytes

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# New privacy standard gets W3C blessing

CAMBRIDGE, Mass.—A Web standard aimed at helping parties determine their own Internet privacy protections received an important boost today when the World Wide Web Consortium (W3C, at [www.w3.org](http://www.w3.org)) issued a formal recommendation that the standard be widely adopted.

The Platform for Privacy Preferences (P3P) uses automated XML-based browser software to help consumers interpret Web site privacy policies and make decisions whether to accept or reject them.

Receiving formal W3C backing means the standard is considered stable, contributing to Web interoperability and is recommended for wide adoption by W3C members, according to a written statement.

"Web site privacy policies are good, but understanding privacy policies is better," said Tim Berners-Lee, the director of W3C and the man who invented the World Wide Web. Quoted in a W3C written statement, Berners-Lee added,

"P3P serves as the keystone to resolving larger issues of both privacy and security on the Web."

W3C has not received universal acclaim, however. Privacy advocates at the Electronic Privacy Information Center (EPIC), among others, say the standard does not go far enough to prevent dissemination of personal information over the Web, yet contributes to a false sense of security.

Further, EPIC representatives have held, by adopting the P3P standard, lawmakers in Washington, D.C., may neglect to pass laws to further strengthen consumer privacy online. "P3P fails to comply with baseline standards for privacy protection," EPIC said in "Pretty Poor Privacy: An Assessment of P3P and Internet Privacy," a report published in June 2000.

"It is a complex and confusing protocol that will make it more difficult for Internet users to protect their privacy," the report states. "P3P also fails to address many of the privacy problems

specifically associated with the Internet."

P3P works automatically with an enabled Web browser to alert consumers when the browser encounters an online privacy policy that does not meet a user's preselected preferences. Those preferences are chosen from a form designed like a multiple-choice quiz. Answers received by the program then are used to measure a user's privacy preferences when a privacy policy is confronted online.

P3P was developed in a joint effort involving industry and privacy groups including AOL, Hewlett-Packard, Microsoft, PrivacyBank and the Center for Democracy and Technology among many others.

"The fact that the Web now has a standard language for describing privacy practices will enable a new level of transparency in Web-based interactions," said Daniel J. Weitzner, technology and society domain leader at W3C, who was quoted in the consortium's written statement. "The added facility for dealing with privacy issues will be especially important

with mobile and other new forms of Web access."

Jim Schwartz, associate director of the Center for Democracy and Technology, agrees with that assessment.

"We think that it's the first step toward the idea of clear notice and machine-readable notice, and we feel that it's an important piece of protecting privacy," he said. "But it's not the whole ball game. I guess you could say."

Schwartz and he understands and agrees with many of the concerns of P3P opponents like EPIC. But he said much of their opposition is based on an assumption that P3P is meant as a Web privacy "passkey," when it really isn't.

There is much more to be done, he said, but recommending P3P was a needed first step. "We're not going to solve privacy issues by having a single answer" he said. "We're going to take a whole range of answers."

Representatives of EPIC did not return calls for comment by press time.

—Norellyan

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## Practical guide to using Perl takes reader by the hand

By Keith Schergil-Roberts

If you've spent any time building a Web site, you've probably had to implement Perl scripts. While not designed explicitly for that purpose, Perl was adopted for use on the Web as its popularity exploded, being used for processing forms, creating dynamic effects, and anything else you could create with a CGI script.

### Perl for Web Site Management

Authors: John Galloway  
Publisher: O'Reilly and Associates  
www.oreilly.com  
ISBN: 1-56592-647-1  
Softcover: 2002 305 pages  
Price: \$24.95

### Rating:

Information content: \*\*\*

Readability: \*\*\*1/2

Intended for: Beginner / Intermediate

Overall rating: \*\*\*1/2



While becoming skilled in using Perl is hard, individual Perl scripts are relatively easy to understand.

And after all these years, there are a lot of available Perl scripts for Web authors to

play with. If you want to learn Perl with the express aim of getting things done, you'll appreciate the approach taken by the author of *Perl for Web Site Management*.

Instead of the usual academic approach to teaching Perl, author John Galloway concentrates on the practical implementations of Perl on the Web.

He spends the first couple of chapters teaching readers enough basic Unix commands (the book pre-supposes access to a Unix system) to be dangerous.

He then proceeds to describe how to build a Web site from scratch incorporating Perl, and discusses setting up a simple search engine, basic CGI form processing, batch processing of text files to HTML, and setting cookies and tracking users through your Web site. All of this is handy, practical stuff most Webmasters need to know.

However, with the advent of scripting languages tailor-made for the Web (ASP, JSP, and PHP, for example), I have to

wonder about the continuing relevancy of books like this. Indeed, I could have done with a book like this five or 10 years ago before these other scripting languages existed.

Another concern is that Perl is not what I would call a terribly "compact" language. Precise, yes. Efficient, no.

The code example for a simple function can run for pages and pages—a function that could be more concisely expressed in a language designed with the Web in mind. (All code examples can be found online at [www.oreilly.com](http://www.oreilly.com).)

Apart from cookies about the subject matter, the book does a good job of taking the reader by the hand and leading them step-by-step through basic programming concepts in Perl using practical examples.

If you need a guide to getting things done with Perl—and want to learn more about the language along the way—you'll appreciate *Perl for Web Site Management*. □

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# JavaScript basics for coding newbies

By Keith Chengli-Bakerts

**A**fter many years of working with people in the computer industry, I can't think of a single person who claims to have written JavaScript code from scratch. Because it's easy to view JavaScript code on my Web page, it's relatively easy to take an existing script and learn just enough about the language to modify it to suit your needs.

## Designing with JavaScript, Second Edition

Author: Nick Nisse and Bill Pea  
Publisher: O'Reilly & Associates

www.oreilly.com

ISBN: 0-595-56001-0

Softcover: 200 pages, 2002

Price: \$52.95

**Rating:**

Information content: \*\*\*\*

Usability: \*\*\*\*

Intended for: Beginner / Intermediate

Overall rating: \*\*\*\*

So, in my experience, most people's —

including professional programmers — knowledge of JavaScript comes from tinkering with someone else's code. If you want to pick up your JavaScript fundamentals while playing with useful JavaScript code, then *Designing with JavaScript, Second Edition* is worth a look.

Needless to say, both of its authors are long-time professional JavaScript coders. Nick Nisse was the sole author of the first edition of this book, which was published prior to his graduation from high school. Bill Pea is a Web designer and writer, who built O'Reilly's online book service as well as having written several articles using JavaScript as a foundation.

JavaScript is used for a number of common functions and features you'll find on many Web sites, including image rollovers, popup windows, auto-scrolling frames, and form pre-processing. This book provides examples of all of these, while speaking in some basic concepts about JavaScript programming fundamentals like objects, methods, arrays, and functions.

So, for example, you learn how to open up JavaScript windows while learning

about functions, create rotating banner ad displays while discovering how JavaScript can manipulate frames, and learn about the document object model (DOM) while playing around with some simple dynamic HTML code. They are all good examples, and chances are that you'll incorporate at least one of these features on your site.

This book is thorough — it not only covers JavaScript basics, it really tries to make the reader think like a good programmer when tackling a particular situation. The section that looks at delivering code tailor-made for a particular browser doesn't just walk you through the code samples, but drives home how important this function can be. Or, when doing the form validation section, the book leads readers through the ways a validator could be fooled, then provides the code to plug each loophole (although, in this case I wish they had included validating international phone numbers instead of just North America numbers).

For those seeking information on more advanced JavaScript features, the book covers such topics as object-oriented



scripting, cross-browser style objects, and creating relational select menus using ID arrays. Though these sound daunting, a reader who has followed the examples up to this point in the book won't find that these complex functions are too much of a stretch — which shows how easy these writers make the topic seem.

By the end of the book, you may even be writing your own JavaScript code from scratch. If that is a goal for you, and you prefer using real-world examples, this new edition of *Designing with JavaScript* is worth getting. □

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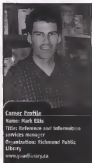
By Sharlene Myers

When planning a career in technology, working in a library may not be at the top of your list. However, a visit to the Richmond Public Library (RPL)—online or in person—could change that. The Richmond, B.C. community institution is an example of how well computer technology and library science augment each other.

In addition to using computer technology to increase efficiency at its branches, RPL hosts an extensive Web site filled with library and community resources, including an online edition of the bi-weekly *Richmond Review* newspaper, a searchable catalogue, electronic books, and online courses in technology and business skills.

Much of the responsibility for this falls on Mark Ellis. As reference and information services manager, Ellis has one foot in the virtual library, supervising and developing Web services, and the other in the physical library, supervising the reference department.

Ellis recently sat down with TCP to discuss his unique position. Following is an edited version of that conversation.



### Career Profile

Name: Mark Ellis

Title: Reference and information services manager  
Organization: Richmond Public Library

[www.rpl.bc.ca](http://www.rpl.bc.ca)

**TCP:** As a child, did you always dream of working in a library?

**ME:** I never even considered working in a library. I spent a lot of time in them, though. My parents regularly took me to the Kinross branch of the Vancouver

Public Library, and I'd get out all the replace books—I wanted to be a pilot. I found out when I was about 15 that I had red-green colour blindness... and you can't get an airline transport rating with red-green colour blindness, so I had to come up with a new plan. And this plan, working in a library, becoming a librarian, didn't occur to me until after I finished my degree.

**TCP:** So what sort of educational background do you have then?

**ME:** I have a BA in international relations, which is suitable for tracing or wrapping fish. And I have a Library Technician diploma from Langara [College]. And then anything beyond that has really been very informal.

**TCP:** How did you get to the position you're in now?

**ME:** When I graduated from UBC [in 1985], I was a head time to be looking for a job. I'd had an interest in computers from early on—I purchased a PC in about 1984—and while I was doing my BA, I was quite frustrated using the library. I put forward library research was a lot of work.

There were a lot of people on the same

*Continued on page 104*

## AWT and Swing windowing: Part 2



In the last Java tutorial, we looked at AWT and Swing classes and when to use them for GUI and applet programs. In this installment, we discuss building a *drawlist* applet (see Fig. 1), which could

be part of a larger system, by highlighting the name of an attribute in the left list and either double-clicking on it or clicking on the > button, the attribute is transferred into the right or selected list.

By clicking on the >> button we can transfer all the attribute names into the right selected list. We can, of course, remove items from the selected list by using the < and << buttons as well. This drawlist has a couple of special rules built into it. The number of items in the right selected list has some numeric bounds—specifically there must be at least one attribute in the right selected list

*Continued on page 102*

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Continued from page 100

program that I was in and resources were in short supply. You spent a lot of time filing out forms for books and then not having those holds filled by the time you needed to turn a paper in.

Combined with my interest in computing, I sort of saw a solution on one hand and a problem on the other, I thought. "Well, this could be an interesting way to get into it." And that's what got me started.

At the end of the Library Tech diploma, I had a practicum, which I did with MacDonald Dettwiler. I chose something that was technology-oriented. That turned out to be a part-time job. Eventually a job here at RPL came up. I had been through here as a teen when I was in the Library Tech program, and was impressed with the interest in technology that was expressed here. [which] I didn't see in very many libraries. I got that job, and have been here most of the time since.

I worked as reference for two or three years, and then I quit and worked for a library automation company, as tech support, for about a year. That job got moved

to Monterey [Calif.], though, and at that point it wasn't practical for me to move, so I stayed and I came back to RPL.

I worked in reference for a while longer. I'd been involved in computer projects right from the start. Since I was dealing with periodicals, we needed a database that we'd use to manage the periodicals and all the checks in... so I set that up. Then I got involved in computers to be used as the reference desk—I used terminal emulation software initially, then I used ASANA, which was a popular text database at the time—to create hypertext databases, like a newspaper index or version file.

There [were] probably about 10 databases like that that I created, so managing them here was really overwhelming. I was interested in doing the computing sort of things. Around 1993, I was moved into the computer department, and that was actually really good timing, because we were just getting into local area networking, then a year or two after that the Internet hit. I was really involved in setting up what was initially a Mac-based network, then getting involved in all the Internet technologies after that.

I worked in the computer department for about seven years, and was then asked to manage the reference department. This kind of came as a surprise to me because it wasn't my job. I thought I was qualified for that the extent there was that I worked with the librarians in the reference department to do a lot of the technology-oriented things which would be on our Web site.

We wanted to get more people involved in doing that, and have people acquire the technical skills to do that. That was really the idea behind putting me in the reference department, so that librarians are in here. I've just been doing that for about a year and a half.

**TCF:** Tell me about your typical workday.

**MB:** When I get in in the morning, I have to deal with any e-mail that are around people calling in sick or not being available... I have to make sure that our service desks are covered. That's not one of the favorite parts of my job. Then after that it's very flexible. It really just depends on what's going on.

To take today as an example, we're in the process of putting up a new Web site, and we have to convert the content from

the existing site. I'm working on the database that has all the URLs on the old site. We need to decide which things are going to be converted and which things are going to be discarded, moved, or otherwise changed, and then [we'll] use that database to manage the project.

We'll have about four people that are working in parallel on doing the conversion of about 700 and some odd pages. That's just a fraction, actually, of the Web site, because we also have the Richmond River online, which we've had up there since about '95. Once you include these pages, there's about 15,000 pages on one site. It's a lot to cope with.

We had another brief meeting this morning looking at workload in our technical services department. [It's] the area in the library where new books come in, where they're catalogued, physically processed, they sometimes have their bar codes, their call numbers put on them, and so on. We're largely eliminating that department—subsuming a lot of that work. At the same time, a number of people in [that] department are retiring. So we're finding out where things are not getting done, which things need to be



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shifted to other departments, and which things are sort of falling on the floor. So it's addressing these sorts of things.

**TCB:** What do you like best about your job?

**ME:** Web development definitely. That's where I'm able to express the most creativity. It's where I feel the library gets the most bang for our buck. In a lot of cases, we create a Web application, and it subsequently requires very little maintenance but can generate a tremendous amount of traffic year after year.

For example, something I did a number of years ago was [put] the Canadian Citizenship Practice Test [on our site]. [Previously], people who were planning on applying for citizenship would come in and they wanted information on what sorts of questions they would be asked, and we'd hand out booklets of these questions and answers.

It seemed like potentially a great Web application. I created a database and put a PERL front end on it, and thought, maybe we'll get 500 requests a month, and that will have been worthwhile. Well, now it runs like 150,000 requests a month—even the first month it was 10,000 or 12,000—

which was just astounding. When you think about it, there's people all across Canada doing this, and it just grew from there, people built links to it and they told their friends and so on.

We saved ourselves a little bit of work, we made a useful service to Richmond—which we're directly accountable to—and we also created a service that was great for people all across the country.

There have been other things like that we followed that with a practice driving test, and that's been up to about 100,000 requests a month as well, there are things like creating authentication for online databases—the new Web site will use quite a bit of personalization.

There's all kinds of potential in terms of what people will be looking for and delivering it, say, based on their age or their language preference. That's definitely the most interesting part of my job.

**TCB:** What percentage of your membership was the Web-based service?

**ME:** It's hard to say. With personalization we'll get a better idea because we'll be asking people increasingly to log onto the site, so we'll know that they're a Richmond person. The population of Richmond is

about 160,000, and we have about 75,000 distinct users per month. A large proportion of those will be outside of Richmond, so we don't know what proportion is inside and which is outside at this stage.

**TCB:** What is your least favourite part of your job?

**ME:** Picking up the disk schedule, as I mentioned earlier, trying to keep the disk covered. Meetings—I'd far rather do stuff than talk about doing things.

**TCB:** What do you do to keep yourself up to speed with your job skills and industry knowledge?

**ME:** Partly it's thinking in terms of customer service—what do people want? Our customers are the same people using the grocery store or the video store, for example. Often, their expectations are driven by what they receive apart from the library. So, keeping an eye on what's going on out there is part of it.

Maintaining technical knowledge [is important]—the tools with which we can better serve our public. So those are certainly significant on the Web side, Web Techniques [now called New Architect, at [www.newarchitect.com](http://www.newarchitect.com)] is a

## • CAREERS & TRAINING •

good one. And certainly [there are] a lot of books based on what we need, anything published by O'Reilly.

Those are the main things I don't tend to do much in the way of continuing education courses. I do that almost entirely on my own. It's a much more efficient use of my time and I get the knowledge that I need when I need it.

**TCB:** What would you consider to be the most important skill that somebody would need to do your job?

**ME:** I think, this isn't a skill per se, but a customer-service orientation is really key. Having the technical skills by themselves isn't really that useful, because you can be really oriented in the technology and very adept at using it, but, that won't translate into better public service.

I was fortunate that I came through a customer-service path. I dealt with the public face-to-face and had that sort of sense. I wasn't just somebody in the back room playing with the computers. That also really makes the computing tasks much more interesting, because you can understand why these things are beneficial. And with good statistics, with the Web in particular, you're able to

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